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THE EDITOR cannot undertake to return, or to correspond with the writers of, rejected manuscript.

LITERATURE.

Spain and the Spaniards. By N. L. Thieblin (Azamat-Batuk). Two Volumes. (London: Hurst & Blackett, 1874.)

TOWARDS the end of the second volume the author apologises for the title of this book. He finds that he has "scarcely said a word on what I wished to speak of when I set to work." Instead of writing something "nicely descriptive of Spain and the Spaniards, I find myself to have written a series of dull recollections of Spain, and of still duller essays on Spanish subjects." The main body of the work is a *réchauffé* of letters and articles which appeared originally in the *New York Herald*, when the author acted as special correspondent of that journal in Spain. It is only in the last forty or fifty pages of the second volume that he really attempts to give some general idea of Spain and the Spaniards. The only parts of Spain, however, with which he shows any detailed acquaintance, are Madrid and the Basque Provinces. Still the book is an interesting one. The writer was well provided with introductions to the leaders of the different political parties; and he found those leaders, male and female, of all parties alike, not averse to being "interviewed." The result is curious and somewhat amusing. Everyone is described pretty much at his or her own valuation; and consequently all his or her actions are depicted under the brightest aspect. Only a few shades of darker tint appear when those in the process of being interviewed indulge in anecdotes about others. Thus, Figueras' opinions of Castelar, Elio's of Serrano, and the Countess of Montijo's of several of her contemporaries come in most opportunely to balance the self-appreciation of the parties themselves. It is amusing too to mark how much an after acquaintance modifies the judgment pronounced on a first interview. This is especially notable in the case of Don Carlos, or Carlos Septimo, as his partisans call him. He was first interviewed, April 11, 1873, at the Château of M. de Pontonx, near Peyrehorade, and, having evidently been crammed for the occasion, comes off with flying colours, as a thoughtful, somewhat liberal, politician, and an amiable, high-minded man. But a closer subsequent acquaintance completely alters the opinion first expressed. The thoughtful politician of vol. i. appears early in vol. ii. p. 26, as "in the present condition of his ideas and views no more fit to govern a people than the author of these pages is fit to be Archbishop of Canterbury." He is presented to us then as "surrounded by a brilliant staff, upon the formation and arrangements of which he has, I believe, bestowed more thought than on any other subject in the whole of his life" (vol. ii. p. 25); a staff, numerous beyond all proportion to its utility, and composed in great part of foreign "mere petty military adventurers."

The amiable young gentleman of the Château de Pontonx turns out to be "a man who does not particularly interest himself in the comfort of others, provided his own wants are attended to, so the members of his staff had frequently to content themselves with accommodation at the best only fit for pigs."

And with this our own private information agrees. Don Carlos' handsome presence and personal courage disposed many a partisan in his favour at first sight, but little by little these opinions have changed. The extreme devotedness, the heroic self-sacrifice, the toils and privations of the noble Basque peasantry and gentry for their king, have produced no corresponding exertions on his part. All serious business that can be shirked is shirked. His powerful frame bears well the marching and out-of-door life of the campaign; but, "le roi s'amuse," and more than once the king's amusements have been the cause of greatest detriment to his arms. Some of the older men, who have spent their lives in the cause, speak with bitter tears of their disappointment in their king, and say, "that were it not for 'la causa' they would not stir a step further for him."

A large part of these volumes is taken up with a description of the progress of the Carlist arms, and with speculations on the future prospects of the cause. The present war is frequently compared with that of 1834-40, of which a rapid sketch is given in vol. ii. ch. 2. But the author has hardly seized the points of difference. Had the present Don Carlos possessed any general at all equal to Zumalacarreñi, he would, we believe, have been long ere this in Madrid. It is *there* his real difficulties would have begun in the conquest of the South and of the large commercial towns. But the present war, except in Catalonia, has been carried on in a wholly different manner from the last. Then Zumalacarreñi and his fellow-leaders were almost always the attacking party, swooping down from the mountains on convoys, surprising and falling on columns many times their strength, and often defeating them. But hitherto, the Carlist leaders have almost always remained on the defensive and waited the attack, as at Puente de la Reyna, Tolosa, Somorrostro, and Abarzuza. Now arms and artillery are imported from abroad, then Zumalacarreñi and others took them from their foes. When the present leaders have gained a victory they seem not to know what to do with it. After the repulse of Moriones at Somorrostro, they had but to cut the rails behind him, and his army would have been almost at their mercy, but they did nothing. After the victory and death of Concha at Abarzuza, they gave Don Carlos and Doña Margarita a "mascarade!" Fortunately for them their opponents are almost as unskilful and are generally in an almost worse plight than themselves, being unable to advance from deficiencies of pay, commissariat, and supplies of all kinds.

But that the Carlist cause should win, at least to the extent of getting to Madrid, if only they had a man of real military talent among them, or if Carlos VII. were at all like Henry of Navarre, we think, can-

not be doubted. Notwithstanding all petty jealousies and disputes among the Carlist leaders—and the French Government have done them the greatest possible service by putting the most formidable of these dissentients, Santa Cruz, out of the way, by internment him at Lille, just as he was preparing another attack upon his old enemy Lizarraga—the men know what they are fighting for and are enthusiastic in the cause. It is no matter that thoughtful men say that it is all a huge mistake, one of the many ironies of history; that the Basques who are practically in the enjoyment of one of the best republics in the world are attempting to force absolutism on the rest of Spain, and are thus endangering the very "Fueros" which they justly value so highly; all this does not affect the fact that the Basque soldiers are really in earnest, and fight as men fight only when they are really in earnest in what they believe to be a good cause. On the other side the troops of the Government hardly know what they are fighting for; the officers are divided, not by personal and professional jealousies only, which will exist in almost all armies, but by profound oppositions on political, social, and religious questions. Half of them would as soon see Don Carlos on the throne as a republic established, although they might prefer Don Alphonso to either; and these differences paralyse the movements of the Republican forces. One cannot but remark the liberality with which troops and supplies were furnished to Serrano and Concha, and the comparative parsimony with which they are dealt out to Moriones and the other generals. Still he would be a daring prophet who would predict anything of a country of which even the inhabitants say, "In Spain that which is impossible is sure to happen."

M. Thieblin, perhaps in some measure because writing originally for an American journal, argues strongly in these volumes in favour of a Federal Republic, as alone suited to the present state of Spain. No doubt the majority of the Spaniards are Federals in a sense. The Basque provinces may even be cited as an extreme instance of Federal government. Not only have they the general "Fueros" or "provincial charters" by which the general privileges of the provinces are established, but in the provinces themselves are numerous petty confederations of five or six villages, towns, or valleys, whose deputies meet annually in rotation at the chief places in each, and transact all local business, taxation, &c. But this does not prove that Federalism would be good for Spain. In the Morocco war, the slowness of the Basques in raising their contingent was a source of great weakness to the country. The local jealousies, internal custom-duties, want of connected roads, would all be increased by Federalism; while the "pronunciamientos" of political generals, bad as they are, would be poorly exchanged for "pronunciamientos" of provinces against the central power; for some kind of centre there must always be. Moreover, the experiment has been tried in Spanish America, under far more favourable circumstances than are likely to exist in Spain, and has succeeded but ill. In the Argentine Con-

federation one or other of the provinces is in almost continual revolt against the central power; while in spite of foreign capital and resources the central power has become so weak that the Indians have definitively regained a strip of territory 200 miles broad from the Parana to the Cordilleras, and make their raids almost to Rosario, a thing unheard of when there was a strong Government at Buenos Ayres. Similar effects of central weakness without any corresponding provincial gain, would in our opinion follow any attempt at Federalism in Spain.

In his farewell chapter, entitled "Adios," the author leaves war and politics, and endeavours to give some account of what sort of people the Spaniards really are. In much of this we cordially agree. With M. Thieblin, we believe that the Spanish soldier, if only by some marvellous change he could be properly clothed, armed, paid, fed, and above all, led by capable officers who would pay attention to his wants, might again become what he once was, the finest infantry soldier in Europe. He is certainly one of the most sober and enduring: and among men of all nations the Spaniard has been found the last to leave, or to grow nervous on, a solitary outpost. Of the general politeness of all classes of the nation there can be no doubt. But while on this account we hold that a Spaniard is often the most delightful companion in the world, we at the same time have no wish to have the slightest dealings of a graver nature with him. Of punctuality, of business, of keeping his word, in the English sense, as to time, place, &c., he has not the slightest idea; of talk, of eloquence he is profuse, but of deeds most sparing. His ignorance, too, is generally profound, not from any lack of intellectual power, but solely from utter want of education and training. Those who have studied with Spaniards at the universities and seminaries speak with the utmost respect of the "dura cabeza Española" as capable of an amount of sustained mental toil which only a German brain can rival.

Of the Spanish lady our author is a most enthusiastic admirer. "You must take," says he (vol. ii. p. 231), "all the virtue of the most virtuous Englishwoman, all the grace and wit of the most graceful and witty Frenchwoman, and all the beauty of the most handsome Italian woman, to make something approaching to a perfect Spanish lady." This is too much. But that the Spanish woman, with exceptions perhaps in the large towns, is as virtuous and makes as good a wife and mother, according to her lights, as those of any other European country, we firmly believe. As to her tact in conversation, in spite of all her ignorance, there can be no doubt; a man who can talk to a Spanish lady at all must be a dolt indeed if he does not soon find himself talking better than ever he did in his life before; and this, we think, is the best possible proof of her skill in the art of conversation. As to beauty, that must always remain a matter of taste; but however beautiful the European Spanish lady may be, she is certainly surpassed in that respect by her South American sisters. With all this, she is often as little open to reason as a child. Of comfort in the

English sense, she has not the slightest notion, either in house or table; and she is rarely "visible" before the afternoon. Gentle and kind as her manner may be, if by chance her passions get thoroughly aroused, there is no crime at which the vengeance of a Spanish woman will stop; and some of the worst deeds of cruelty we have heard of have been instigated by ladies whom from their manners in society you would believe to be incapable of injuring a fly. The present Carlist war is undoubtedly an improvement on the last; but we cannot agree with the writer as to the lack of cruelty among the Spaniards, and we believe it to be mainly a result from their indifference to animal suffering, an indifference kept up, if not acquired, by the witnessing of bull-fights. There is brutality enough in the roughs of our Black Country and of our large towns, there are fearful cruelties practised on board our own and American merchant vessels, the tiger-like ferocity of a French mob is hideous in its insanity of fury, but we think no European nation can parallel the wanton delight at the sight of suffering which a Spaniard will exhibit.* Of this an instance (which was repeated a few years back on a poor idiot on the frontier), is given in a note in vol. ii. p. 83:—

"The way in which Gomez treated those who opposed him is nicely illustrated by the story of his having once ordered a Castilian curé, who professed liberal opinions, to be shod on hands and feet with donkey shoes, and to be harnessed as a baggage animal. And when the curé proved incapable of performing such duties for any length of time he had him shot."

All that is graceful, and agile, and daring in a bull-fight is capable of being performed without cruelty, though perhaps not without danger. Any one who has seen a South American Guacho charge and knock over a bull without injury to himself or horse, or two of them perform the more difficult feat of riding one on each side of an escaped bull, and without touching or being touched, force him back to "corral," in spite of his desperate charges at horse and man, will vouch for this.

But, after all, Spain is a country of contradictions. We have known ladies, travelling, and residing there alone, delighted with it; we have known others return almost in tears at the insults offered them. We have known men declare that the Spaniards are the best fellows, and Spain the finest country, in the world; while at the same time others have come back from a half-finished tour pelted by the "gamins" in the streets. It is singular how different the experience of a special correspondent travelling with the Carlist staff through a Carlist country is from that of the ordinary traveller, *e.g.*, vol. ii. pp. 297, "Whether you knock at the door of an inn, or of an isolated farm, all the women of the house come to receive you, and there is not a thing that will be refused you." The trouble of the ordinary traveller is generally first to find anybody at all in a Spanish inn (we do not mean hotels in the towns), and next to secure either bed for the night, or anything to eat. Often he has to go

* This is allowed by F. Caballero, than whom no more thorough-going Spaniard exists, and is brought prominently forward in her novels.

himself and forage for the latter through the village. And when at last it is cooked after long waiting, the service is mostly done with a cool nonchalance that seems meant to impress the stranger with the idea that he is not wanted there, and that it is a great favour to wait upon him at all. For honesty and fidelity the Basques and the Gallegos are renowned. We have seen the latter habitually trusted as men of no other nation would be. Nor have we usually met with the savagery which marked the author's servant, vol. ii. 306-7. This we do not think is to the credit of Spain; for we have known a wild Arab boy quite as ready and faithful, and who showed equal grief at parting from his master, but no such sullenness and ill-temper as did Cipriano Solano at the last. But "Cosas de España" are things difficult to understand, and we do not give our own impressions as infallible. Only perhaps, on the whole, we think that a better idea of what Spaniards, and especially Spanish women, really are, is to be obtained from an intelligent perusal of the novels of Caballero and Trueba, than from all the journals of tourists and correspondents put together. In saying this, we do not at all wish to prejudice the reader against the book we have just reviewed. For the English reader, it is one of the best of the kind with which we are acquainted, and will remain a most valuable, because an impartial, contribution to the history of the early campaigns of the Carlist forces in the present war.

WENTWORTH WEBSTER.

Les Chansons Joyeuses. Par Maurice Bouchor. (Paris: Charpentier, 1874.)

MR. CARLYLE is responsible for the statement that the Arabs used to indulge in public festivities when a new poet appeared among them. Ambassadors came from tribes at other times unfriendly to congratulate the commonwealth, and more joy could scarcely have been exhibited if a distinguished mare had given birth to a foal. Modern society has learned to take the advent of a poet more calmly; indeed, the bard's relations generally snub him, much as the Zulus do a tribesman who shows symptoms of becoming a diviner, or medium, as we should call it. "You will turn a soft-headed fellow, that sits by his fire and does nothing but divine," one Kaffir will observe to another with all the frankness of an early friend. And the bright lyrist nowadays, who looks as if he meditated publishing, is commonly rebuked in much the same way, especially if he happen to be a minor. This is the position of M. Bouchor; but France seems to have determined to make an exception in his case. There are very many young poets in France at present. Their works are generally printed very nicely, and have pleasant vellum covers. An etching of the minstrel's portrait usually forms the frontispiece, much loving care being devoted to his flowing locks. It is allowed that these pretty volumes have but a small sale; the coarse public in fact never does care much for sonnets. But M. Bouchor's book appears in a very different way, and has met with a much heartier welcome. It comes to the test in the classical yellow covers of

Charpentier, and the very name *Les Chansons Joyeuses* shows M. Bouchor's contempt for the melancholy Parnassiens.

"Je hais jusqu'à la mort ce siècle qui larmoie," he says, and aims at a more frank and Rabelaisian tone. Now most French lyrists are either studiously gloomy or studiously gay. They sit in the dust or in the sawdust, they share the despair and repentance and the mad mirth of Villon and Regnier. It is only of late that the disembodied school has found disciples in France, that the poets have lamented their inability to believe, or deny, to suffer, or be glad. M. Bouchor is quite determined to be glad, and perhaps the most vigorous lines in his book are his challenge to the clique of idle singers of an empty day.

"Je crois que vous prenez des poses de théâtre ;
Je ne distingue pas votre air sacerdotal
De l'air jésuitique, et, sous le masque en plâtre,
Je ne lis sur vos fronts aucun signe fatal.
Vous ne voulez pas être applaudis par les masses.
Et solitairement vous planez dans les cieux ?
Pour vous montrer à nu, moi qui hais les grimaces,
J'irai bien relever votre robe de dieux.
L'on vous verra claquer des dents, mornes et pâles,
Maigres à faire peur, et tout roués de coups,
Et quand vous chanterez, il sortira des râles
De ces tambours crevés, qui sont vos cœurs, à vous."

M. Bouchor and his friends are to change all that—

"Mais nous, dont la vigueur encor se développe,
Le front levé parmi les sots et les moqueurs,
Nous voulons, en dépit de cette vieille Europe,
Garder comme un trésor la jeunesse des cœurs."

The negative side of all this, the contempt of affectation, the assurance that life is not "played out," as Mr. Swinburne calls it, is genuine and sincere enough. But when we come to consider M. Bouchor's own notion of what life is, and what enjoyment, his sincerity is less pure, and his philosophy anything but satisfactory. Any one may answer to people who whine about existence, that life in all its shapes of pain and delight is its own exceeding great reward and consolation. The game is worth seeing out, and this farce, in which we are puppets, may be enjoyed if we think of ourselves as spectators. But M. Bouchor's philosophy is more limited than this. He makes youth, with its passions and pleasure, the sum of life, and in this he only repeats the burden of De Musset and of Murger. To be sure he understands youth in a more healthy way than these unlucky bards. The mere sense of spring makes much of his joy; the first division of his book is as full of pleasure in the skies and songs of May, as the earliest lays of the trouvères. His verses "dally with the innocence of love," and surely no Mimi Pinchon or Mussette inspired these pretty lines:—

"Mais ma bien-aimée est la fleur des fleurs,
L'oiseau des oiseaux, la rêve des rêves,
Qui fait, dans le bois, palpiter les sèves,
Et fondre d'amour la rosée en pleurs.
Et ma bien-aimée embellit les choses ;
Sa voix fait plus doux les rossignols,
Et ses grands cheveux, légers et follets,
Ravivent encor le parfum des roses.
Et quand, à travers les feuilles, je vois
La blonde aux yeux bleus, en claire toilette,
Simple et douce, ainsi qu'une violette,
Je crois voir passer l'Âme des grands bois."

This is a fair specimen of the idyllic love songs, full of youth and the sense of the

spring, which are perhaps M. Bouchor's best claim to be a new and real poet. His *Variations sur quelques Avis de Shakespeare* do credit to his taste, which is indeed very much inclined to the study of English poetry. He even goes so far as to like tea and Tennyson, in which he probably differs from the romantic youths who took up Shakspeare in 1830. About Italian literature he confesses himself to be un *préjugé*, thinking perhaps that Petrarch is the only poet of Italy, and that Petrarch is too much in the manner of the detested Parnassiens.

All this is interesting enough, but it is not particularly joyous, and indeed his joyousness is the enigma, perhaps the weak point, of M. Bouchor's volume. Is he really so fond of pale ale, or does he only say so to annoy his ethereal opponents. What is the meaning of his vinous pantheism—

"La terre tourne, le grand ciel
Tourne; tout tourne, tourne! Au diable,
Je veux crever ma poche à fiel,
Et déclarer tout admirable.
O ciel, ô terre, ô grande mer,
Ivresse éternelle des choses!
Je confonds, n'y voyant plus clair,
Les gouttes de vin et les roses."

The *Chœur de Buveurs en Hiver* is a capital drinking song, full of noise not unharmonious. But a drinking song is one thing, and a philosophy of drink another. M. Bouchor is as frequent in his praise of wine as Omar Khagam, and apparently with no more sincerity. It is a pity if he has reached the oracle of the Bouteille so soon, and found that the response is *TRINQ*. But after all his oracle is not absinthe, nor ha'chich—and probably he only insists on being jolly from a natural hatred of the poets in white vellum. His verses have a musical ring and plenty of vigour; his other qualities are probably best to be appreciated by his contemporaries. On the whole, we think it would be premature to send a special mission to congratulate France on her youngest singer.

A. LANG.

Commissioni di Rinaldo degli Albizzi per il Comune di Firenze, dal 1399 al 1433. (Firenze: tip. Cellini, 1867-1873.)

AN impression long prevailed, mainly fostered by Roscoe's *Life of Lorenzo the Magnificent*, that the so-called Renaissance in literature and science was chiefly owing to the influence of the Medici. We know better now. Italy has thrown open her archives with a liberality equalled by few other countries, and the authentic materials for history which they contain have been published with a profusion which almost creates an *embarras de richesses*. Among these the three volumes which we now notice have appeared in a series of *Documenti di Storia Italiana*, issued by the Tuscan Deputazione di Storia Patria. The years to which they relate (1399-1433) fill almost the whole of the half-century of aristocratic government at Florence that was put an end to by the bloodless but decisive revolution which, in 1434, raised Cosimo de' Medici to almost uncontrolled power as the head of the popular party.

During the greater part of the fourteenth century Florence had been agitated by the factions of a new burgher aristocracy risen

from the loom and the bank. In 1373 the mob, hitherto excluded from political power, seized upon the government, and exercised power in a way which reminds us of the Commune of 1871. After three years of anarchy, the party which had been dispossessed regained its authority, and established a government the most successful and glorious which Florence ever knew. It was then that the city rose to the first rank among Italian States, and bridled the ambition alike of the Visconti of Milan and of King Ladislas of Naples. Nearer home, Pisa was subdued, Cortona and Leghorn were acquired by purchase. Great and splendid public works attested the vigour of the Commonwealth. Before that half-century reached its close; Brunellesco had completed the dome of the cathedral, and commenced the churches of San Lorenzo and Santo Spirito. Ghiberti, too, had finished one of the wonderful gates of the Baptistery, and was at work upon a second; whilst Donatello had breathed life into not a few of the productions of his chisel, and Masaccio had taught the painters of the world to take Nature for their master in gesture and expression.

This is the epoch on which the papers of Rinaldo degli Albizzi throw new light. They bring before us the life of an influential citizen, busied in the public affairs of a thriving commonwealth, as no biographer could delineate it. He was the last head of the family and the party by which Florence was governed during the half-century. Originally sprung from Arezzo, his family rose with the class of wealthy citizens which at the end of the thirteenth century had got the better of the ancient nobility, and which, through the institution of the guilds (*arti*), became masters of the State. Born in 1370, he was eight years old when the revolution which overthrew the rule of this burgher-aristocracy for a time sent its leader, his grandfather Piero, to the block. As a boy he witnessed the revival of the authority of his father Maso (Thomas), who exercised undisputed power till his death in 1417.

At the mature age of forty-seven, Rinaldo succeeded his father in the direction of the Commonwealth. He had already filled all those offices which had now become almost hereditary in the family of an influential citizen. For the machinery of government was extremely complicated, and the short tenure of the innumerable offices demanded the co-operation of all the members of the dominant class. Except when these officials were called away from home, as ambassadors for instance, or as commissioners with the army, their services were gratuitous. Yet these gratuitous offices were eagerly sought on account of the influence which they gave; and those who could not be relied on by the ruling party were excluded from them by various contrivances sanctioned by the letter of the law, even if they were opposed to the spirit of the constitution.

Never was any citizen more frequently employed than Rinaldo degli Albizzi. We meet him everywhere, even in commissions of subordinate importance. For in those days such second-rate employments were no more despised by a statesman than the carving of doorposts or the painting of pieces of furniture was despised by a great

artist. From 1399 to 1433 Rinaldo was more than fifty times absent from home on mission to the various states of Italy, or even to the Emperor himself. In war he had commissions to look after the army. In peace he had various employments in Florentine or foreign towns. Finally, Pope Eugenius IV. conferred upon him, in 1432, the dignity of Senator of Rome. He was entrusted with the most important affairs. In 1418 he was sent to Pope Martin V., then on his way from the Council of Constance, with instructions to urge upon him the convocation of a new Council to complete the reforms left unfinished at Constance. In 1420 he accompanied the same Pontiff from Florence to Rome, and he was afterwards employed in Naples in pacifying the contending factions of that State. When Filippo Maria Visconti attempted to extend his authority over central Italy, Rinaldo's influence was used to separate the Pope from the Milanese alliance, to retain the friendship of Venice, to arm the rulers of Romagna, to place the fortifications of the Apennines in a state of defence, and to plead at Vienna and Buda with the Emperor Sigismund for a settlement of all questions at issue between him and the Venetians, in order that the Republic might be at liberty to turn its full attention to the affairs of Italy. From 1427 to 1430 he remained chiefly at home, intent upon a new system of taxation known by that name of Catasto which has since been generally adopted, and which rose out of the financial necessities of the State. In 1430 he was named commissioner for the war against Lucca, a war which he had eagerly promoted, and which, by its failure, paved the way for the overthrow of himself and his party by Cosimo de' Medici. Rinaldo's last commission was an embassy to the Emperor Sigismund in 1433.

All this while, from 1423 to the close of his public career, Rinaldo, with the minute exactitude characteristic of the Florentines, was keeping a daily record of the events of his life. For its publication we are indebted to the Cav. Cesare Guasti, at present head of the Florentine archives. He has done his work admirably. The text is carefully edited, and each embassy or commission is introduced by an introduction, including numerous documents either *in extenso* or abridged. There is also an index of no less than 160 closely printed pages to guide us through the labyrinth. The conscientious accuracy of the editor is only equalled by that of the statesman whose work he has illustrated.

It is needless to say that this book is full of information on the policy of the Popes and of the Italian States. Nor is it only of public affairs that they treat. Rinaldo tells us that in 1406 he bought at Arezzo a copy of the Bible for eleven florins (ducats). In the list of his expenses he notes even the soldi paid for barges in passing the rivers. Travelling was neither easy nor expeditious. From Florence to Bologna was a journey of two days and a half. In 1421 Rinaldo took seven days in going from Florence to Rome, and it required sixteen to reach Vienna from Venice, by way of Pontebba. Sometimes the names of places in Germany are hardly

to be recognised, and it is a pity that the editor should not have cleared up these difficulties for his readers.

Since the middle of the fourteenth century warfare had been in the hands of mercenary troops. At first these were composed of foreigners, latterly of Italians formed in the school of Alberigo di Barbiano. Under the Italian *condottieri* war became less savage than it had been in the days of captains like the German Werner von Urslingen, who was called the enemy of God and man. But the system was bad at the best, as the States were dependent upon the goodwill of the captains, who were absolute masters of their men, and were constantly changing sides. In the time of Rinaldo the system had reached its highest perfection under captains like Sforza Attendolo and Braccio da Montone. Yet even then what a want of confidence there was between the governments and their commanders, and how petty was the warfare itself, with its endless sieges of the meanest *bicoque*, and its fights bloodless to the soldiery, but entailing endless misery upon the populations. Several of Rinaldo's commissions have reference to military affairs, and the papers relating to the war with Lucca, which began in 1429, fill no less than 328 pages. The want of vigour in the commanders, the insubordination of the men, the disorder and want in the camp, the quarrels of the leading men, are equally conspicuous in this ill-conducted war. It proved ruinous to the reputation of the celebrated Brunellesco as a military engineer. He formed a plan for setting Lucca under water by obstructing the river Serchio by a dike. Unluckily for him, the water flowed into the camp of the besiegers instead of into the town.

Further on we learn that, in 1431, the Florentine forces consisted of 993 lances or heavy cavalry, and 3,740 foot under twenty-two captains. But these papers throw no light on the origin of the enmity between Rinaldo degli Albizzi and Cosimo de' Medici. Shortly before the outbreak of the war, both men appear in friendly intercourse. But we are still reduced for information to Cavalcanti, from whom Machiavelli derived his knowledge. Rinaldo, thwarted by decisions taken at home and by odious calumnies, threw up his commission when things began to look badly, but his position in the State appeared unchanged. As late as the beginning of 1433, he was sent as ambassador to Siena. Six months later the imprisonment and exile of Cosimo took place on September 7. But the records of the sittings of the Councils say nothing about Cosimo. The year was not over when his recall was talked about. In 1434 new political difficulties led to a rupture with Milan. The Florentines were defeated, and Rinaldo's popularity was at an end. On September 29 Cosimo returned, and his adversaries were banished. If these volumes furnish us with no account of these changes, they show how the ruling party lost ground through a change in public feeling. In a constitutional monarchy there would have been a change of ministry. In a State where real power was not with the legal representatives of government, but with a

party whose authority was not limited by any constitutional forms, the total downfall of that party was the natural result. Rinaldo spent the rest of his days in banishment.

"Messer Rinaldo," says Cavalcanti, "did not know fear. His hands were clean; he was well versed in science; he was steadfast, and a lover of justice so far as to be accused of harshness. He was simple in his manners of life, and hated profusion, whilst he used to say that temperance was necessary to health, which was interpreted by his adversaries as avarice. Had this man not been so haughty, his excellent qualities would have outshone those of many others. But his pride led him to underrate the virtues of others whilst it obscured his own merits."

Such a man was not likely to submit willingly to his fate, and, like so many other exiles, he fell into the error of trusting to foreign arms for his restoration. In 1440 he was branded as a rebel and a traitor, and, seeing that his hopes were at an end, he went on a pilgrimage to the Holy Sepulchre, and died at Ancona in 1442, not long after his return, in the seventy-second year of his age.

Rinaldo was no match for Cosimo. Cosimo was secret, cautious, and crafty, inclined to let others appear in the direction of affairs. Rinaldo was open, impatient, and impetuous. But the Medici owed their prosperity as much to good fortune as to their own abilities. In more than one instance they reaped where others had sown. The government of the Albizzi raised Florence to the height of intellectual and political pre-eminence, and laid the foundations for the rule of Cosimo and Lorenzo de' Medici, just as in later times Julius II. prepared the way for the splendid epoch which bears the name of Leo X.

ALFRED DE REUMONT.

Leicester Square: its Associations and its Worthies. By Tom Taylor. With a Sketch of Hunter's Scientific Character and Works, by Richard Owen, F.R.S. (London: Bickers & Son, 1874.)

THE inhabitants of London have reason to be proud of their parks and squares, where they can occasionally turn their eyes from dusty bricks to refresh them with the sight of trees and grass. Napoleon III. thought so when he introduced the London square into Paris, and now Baron Albert Grant presents us with a Parisian adaptation of the original English idea. It is not, perhaps, inappropriate that the French quarter of London should have a slice of Paris set down in its midst. Although we miss the noble trees that once adorned it, the square is now for the first time within living memory an ornament instead of a disgrace to the metropolis, and the supply of seats among flower-beds is a boon for which all tired Londoners should be thankful to the munificent donor, and to the Defence Committee, whose prompt action prevented the enclosure from being built upon. The busts of the four great men which adorn the corners of the square are well selected, and it shows the great interest of the neighbourhood that such representative men as Newton, Hogarth, Reynolds, and Hunter could be chosen for the purpose. As to the central figure, we

must consider it out of place. It would be well to have a statue of Shakspeare on Bank-side or at Blackfriars, but we think that here a representation of "glorious John" Dryden would have been more appropriate, as he lived close by in Gerard Street, and called himself, in the dedication of his *Don Sebastian* to the Earl of Leicester, "a poor inhabitant of his lordship's suburbs, whose best prospect is on the garden of Leicester House."

It is to commemorate this formation of "a pleasure ground for the people" out of a waste that Mr. Tom Taylor has written his interesting history of the past and present condition of the square. Taken as a whole, the biographical largely preponderates over the topographical element in the book; but this is not greatly to be regretted, as it allows the author room for a full and lively account of the various artists, philosophers and statesmen who were either inhabitants or lodgers in the square. It is true that much of the doings of these worthies has very little local interest. Leicester House furnishes a long list of distinguished people, for there lived the numerous members of the noble house of Sidney; the unfortunate Elizabeth, Queen of Bohemia and daughter of our James I., who was called by her husband's enemies the "Snow Queen," and by all the rest of the world the "Queen of Hearts;" the ugly but popular Prince Eugene, and sundry Princes of Wales. Savile House sheltered Peter the Great when he came to see our dockyards, and got royally drunk with our wine and brandy mixed with pepper. Other houses supply the names of Swift, who lodged in the square in 1712; John Hunter and Sir Charles Bell, Hogarth at the Golden Head, and Reynolds at No. 47. On the doorstep of this house the great painter found one morning a little ragged urchin, whose portrait is now familiar to all in the exquisite picture of *Puck*. Thomas Lawrence might have been added to the list of residents, as he came here on his arrival in London with the hope of enticing some of Reynolds's sitters away from him; but this ill-advised rivalry continued only for a short time, and Lawrence soon left the square. Had Mr. Taylor not confined himself exclusively to the houses in the square, but included some of the immediately surrounding streets, as he does in the single case of Newton, he might have added to the number of his worthies. To instance but two out of many, Opie the painter lived in Orange Court, and Woollett, the greatest of English engravers, in Green Street.

The plates that illustrate this book enable us to picture the successive states of Leicester Fields. First, there is Agas's map of London in the latter end of Elizabeth's reign, in which we see the lammas land, that was even then a subject of contention, used as a bleaching ground for the laundresses of London, and divided from other fields by hedges which mark the streets still known as St. Martin's Lane, and that formerly called Hedge Lane. There was then no sign of a house between the cluster of buildings connected with the Royal Mews at Charing Cross, and the little village of St. Giles's in the Fields. In 1630, preparations were being made for the building of Leicester

House, and the Earl of Leicester was allowed to take in a portion of the common on payment of 3*l.* per annum to the parish. A way across the fields, however, was to be left open for the inhabitants, and they were to be allowed space to dry their clothes upon. In 1637, workmen were engaged in finishing the upper rooms of the house. Faithorne's map (1658), shows Leicester House, and Newport House to the east of it, but the fields still remain. It would seem, if this map is to be depended upon, that old Leicester House stood about the centre of the present square, and this supposition was corroborated during the late alterations by the discovery of extensive foundations there. In 1671 the buildings on the south side were finished, and before the end of the century the ground in the centre was railed in. When new Leicester House was built on the north side is not known. Garden squares sprang up in London about 150 years ago. Previously the open spaces were carelessly kept, and became the dust-heaps of their respective neighbourhoods. St. James's square was beautified in 1727, and Leicester Fields were laid out about the same time. It was probably between 1720 and 1730 that Sutton Nichols's view of the newly planned square was published. A copy of this does duty as a frontispiece to Mr. Taylor's book, but it is there incorrectly dated 1700. Among George III.'s maps in the British Museum there is an interesting MS. plan of the proposed alterations, in which the awkward shape of the square is shown, and where it is stated that "the trees round the bason will hide the irregularity of the grass plots which could not be made otherwise by reason of the irregular figure of the square." Mr. Taylor has for the first time given the correct date of the erection of the notorious effigy of George I., which has gone through more vicissitudes than have perhaps fallen to the lot of any other statue. It was in 1748, when the quarrel between George II. and Frederick Prince of Wales still raged, that the latter, glad to put an affront upon his father, co-operated with the other inhabitants of the square in buying the statue of his grandfather at the sale of Canons. On the Prince's birthday, November 19, the statue was uncovered, and for many years after the "golden horse and man" was one of the London sights.

In the seventeenth and eighteenth centuries the square was a dangerous place after dark, but it was probably not much worse than neighbouring parts, for few districts of London were then free from danger. About 1670, Ferdinand de Macedo, a Portuguese, while crossing the fields, was knocked down and robbed by three life-guardsmen; and in 1699 some roystering noblemen and captains, who had quarrelled at a tavern hard by, fought a duel in Leicester Fields. Mr. Taylor's description of the fight gives us a vivid notion of the darkness and desolation of the enclosure. Somewhat later, Smith, in his *Life of Nollekens*, describes the danger of that part of the road where the lofty row of elms stood on the east side of the square. When Leicester Fields became the abode of royalty, mobs were often collected there to see state ceremonials; one of the last of these was on October 26, 1760, when

George III. was proclaimed king before Savile House. Twenty years afterwards the Gordon rioters attacked this same house, which was then possessed by Sir George Savile, M.P., and stripped it of its valuable furniture, books, and pictures, which they burnt in the fields in front.

The central position of Leicester Square has made it a peculiar home of sights, from Lever's Museum of Natural History, which was a rival to the British Museum in popularity, to the man with his telescope, who is immortalised by Wordsworth. Sir Ashton Lever, who filled Leicester House with his curiosities, was a collector from his youth, and when he grew up he would sell (according to Mrs. Montagu) an acre of good land for an extraordinary fungus. The next popular exhibition of importance was Miss Linwood's gallery of pictures in needlework, which interested our forefathers for many years, and is still remembered by some now living. Mr. Taylor pays a warm tribute to the beauty of Burford's panoramas, which unfortunately are now no more; but the list of Holophusikons, Eidophusikons, &c., is too long a one to allow us to follow him in noticing all the shows of the square.

It is a striking instance of the stability of London property, that the Sidneys who gave the name of their title to Leicester Square continued their interest in it until near the close of the eighteenth century, when they sold the property to the first proprietor of the Tulk family for 90,000*l.*, to pay off the encumbrances on Penshurst, and it was to the representatives of this family that Baron Grant paid 13,000*l.* for their shares in the enclosure.

HENRY B. WHEATLEY.

My Life and what I Learnt in it. An Autobiography. By Giuseppe Maria Campanella. (London: Bentley & Son, 1874.)

THIS is an artless, rather than an ill-written book, but it is not one of those happy autobiographical rarities in which the absence of art results in the growth of a natural masterpiece. Some of the technical defects are no doubt owing to the difficulty of translating very simple thoughts into a foreign idiom, without attempting to enliven them with idiomatic turns, generally misplaced. The title of the book itself is a case in point: it endeavours to be popular and attractive, and succeeds in being the reverse of descriptive; for the story of the writer's life only begins to be told in any orderly detail with the entry upon his novitiate (date not given), and ceases altogether with the fall of Venice in 1849, while the conclusions to which the life may be supposed to point appear full-grown in the first chapters, and the processes by which they became evident to the writer's mind are nowhere described and only unconsciously indicated. The narrative is sufficiently interesting to make its unintentional shortcomings matter of regret. Signor Campanella by no means exaggerates the importance of what he has to tell, and is quite willing to tell it honestly; but we gather that he was without the composed self-consciousness that makes the absolutely accurate observer, while the lapse of time has deprived his recollections of the freshness

that enlivens any well-meaning witness's account of his own experience.

Signor Campanella was born in 1814 at Spinazzola, in the province of Bari. His father was a respected magistrate, who traced his descent from a brother of Tommaso Campanella; his mother, according to the autobiographer a person of "excellent intellect and capital good common sense," evidenced as to its extent by her courageously calling some preaching Jesuits, at one time very popular with the ladies of the neighbourhood, "those black fellows," though it proved insufficient to emancipate her from a share in those prejudices of her time and surroundings, according to which it was indispensable to the credit of a respectable family that where there were six sons three should be dedicated to the service of the Church. Giuseppe was one of the three sacrificed. His education was at first conducted under the auspices of an uncle, a student who had adopted the monastic life as a protection against ecclesiastical police spies, but was afterwards abandoned to some illiterate Capucins, much addicted to the use of an instrument of torture resembling the "tawse" of Protestant Scotland. It is characteristic of our author that his memory of their ignorance and bigotry is enlivened, if not embittered, by the association of these qualities with the painful extra-theological experience. This is, in fact, the only point of real psychological interest in the autobiography; the jealous tyranny of the Roman hierarchy and the demoralising effect of its oppression upon all concerned, especially upon the lower orders of the clergy, who had virtually to choose between alternatives which comparatively few were acute or candid enough to see in their true light—the alternative of serving as hammer, or as anvil—these elements in the story are brought out very clearly and effectively, not indeed by the author's trite moral reflections and bits of Exeter Hall declamation, but by the picture of a practically despotic, all-controlling power, habitually at variance with the energetic impulses of its more robust subjects, and, by its material ascendancy, compelling their revolt to an impractical concentration in feelings of indignation. When the victim of some particular piece of oppression has no other outlet for his indignation than by intensifying his sentiment of hatred against the oppressor, his rational dissent from the tyrant's principles is apt to lose its speculative breadth and temperance; a power that wishes its opponents to keep their temper and be quite reasonable must not be too strong, and, if the fact had not been known before, Signor Campanella's autobiography would have sufficed to prove that half a century ago the Papacy was still as much too strong for its spiritual subjects as it was for the author of the *City of the Sun*.

The work opens with a pretty sketch of the Spinazzola contadini at work and play, rather too much generalised, however, as if the writer was not aware of the interest felt in ancient customs, and especially in every surviving scrap of heathenish superstition. He makes the Church responsible for the poverty and ignorance of her faithful children, while giving her no credit for the

picturesqueness for which she is also in part answerable. Good village schools may teach some things more profitable than the traditional art of improvising pretty love-songs in dialect, but they are habitually fatal to the latter talent, whatever it may be worth; and if villagers are to enjoy two seasons of riotous festivity in the course of the year, it is perhaps an open question whether it is best for their morals to riot with less reserve because the spiritual powers are conceived to be tolerant of certain sins on certain occasions, or to risk their habitual piety of spirit by conceiving the powers in question as imposing impracticable anti-social restraints. Signor Campanella, while thinking it shocking that the boys and girls of the village should meet in church on Christmas Eve to flirt and pelt each other with sweetmeats, also resents the severity which condemned a young priest, his own brother, to a month of spiritual exercises in a convent as a penance for surreptitiously attending the Carnival in a mask. Don Giuseppe's novitiate was passed in a convent of mendicant friars at Banzi, and his account of the escapades of his superiors and fellow-novices bears all the marks of truth; and here again his conclusions seem more irrefragable than his arguments. There is something wrong in a system which imparts a flavour of sacrilege to harmless schoolboy mischief exactly in the case of those called to the most sacred offices: the only vessel available for cooking a dish of stolen macaroni was one in the sacristy containing holy water. For taking the lead in this exploit Campanella was condemned to public penance and expulsion; but his family persisting in their entreaties, he consented to be pardoned, and encouraged to make his public profession at once. Padre Luigi, as he is to be called for the next few years, is the possessor of a fine and powerful bass voice, and having studied under Francesco Stabile, his reputation as a singer spread through the province, and he was frequently summoned to assist at solemn musical services in other convents or churches. On one occasion some Americans, who were struck by his voice, sought an acquaintance, and gave him fifty dollars, and an invitation to make his fortune on the stage in their country. He was only dissuaded from the attempt by Stabile, who represented to him the difficulties of escaping to the coast and the fatal consequences of his arrest as a runaway priest with a forged passport. Immediately afterwards he was summoned to Rome "to compete for the primo-basso at the Sistine Chapel." On the way he was twice threatened with arrest by an omniscient police, for going to the opera, and not staying at the convent of his order, but was promptly released on the offer of one or two scudi. The description of the solemn musical examination of the candidate is curious and interesting. Padre Luigi was elected, and for a time lived contentedly at Rome, the vow of poverty not being supposed to interfere with well-paid engagements to sing in different churches, until his relations with the Liberal party became suspicious; then he was forbidden to sing on his own account, and soon afterwards was ordered to leave Rome for Naples, his appointment at the Sistine Chapel being vir-

tually revoked without appeal. There was of course no remedy, and the same kind of mild persecution—of the patriot through the *virtuoso*—being continued at Naples, he resolved upon procuring his secularisation as a step towards greater liberty, to be used in moral and revolutionary propagandism. By 1848 he had become well known to the Liberals of Naples, and his voice, silenced in the churches, found ample employment in the streets, in drowning cries that threatened "Death to" anybody in particular, and substituting the more harmless "Away with," or else an edifying "Viva!" Campanella accompanied the Neapolitan volunteers who started for Lombardy with the small contingent sent by Ferdinand II., and then recalled. The volunteers went on to Venice and joined in the defence: the slight sketch of the tragical interval ending with the capitulation is enlivened by a serio-comic picture of the *ex-basso profundo* preaching at the top of his voice to the Austrian outposts on the sins of tyranny, and once seizing the opportunity to hurl quite Homeric defiance and denunciation at Radetsky in person.

EDITH SIMCOX.

The Scottish War of Independence: its Antecedents and Consequents. By William Burns. (Glasgow: James Maclehose, 1874.)

THIS is a polemical but vigorous account of the war which created modern Scotland. Not content with accepting Mr. Freeman's rash challenge on the old question of the Scotch vassalage prior to Edward I.'s conquest, and doing battle with the over-praised author of *The Greatest of the Plantagenets* on behalf of Wallace and Bruce, both of which topics fairly belong to his subject, Mr. Burns' combativeness has led him to rush into the Pictish controversies, and fight Mr. Skene on the relation between the Picts and the Scots, and Mr. Burton on that between the Scots and the Anglo-Danish population of Lothian. His book would have been better had he confined it to the history of the War of Independence. He doubtless succeeds in pointing out—what any reader of the Prefaces to the *Chronicles of the Picts and Scots* and the new edition of Fordun could do—the risk of error in constructing a history of Scotland in the seventh, eighth, and ninth centuries from such materials as the brief entries in the Pictish Chronicle and the Irish Annals, the earliest of which was compiled not earlier than the end of the tenth century; and the conjectural character of some of Mr. Skene's results, such as his reconstruction of the lists of kings of the Picts, and of the Scots of Dalriada, and the supposed conquest of Dalriada by the Picts in 736. But sufficient respect is not paid to the labours of a writer who has collected once for all the Celtic sources, which though, like the Scandinavian, neglected by too many historians, yet form the necessary basis of early Scotch history, and has re-introduced a critical spirit and exact scholarship into this dark period.

On the question of the vassalage, Mr. Burns follows Mr. E. W. Robertson, whose reading of the authorities, though it cannot be supported on every point, is more correct

in its general result than that of Freeman, as any one may see who tests the statements of both authors by the Saxon Chronicle itself. Mr. Burns seems unaware that a more judicious school of English historians—Hallam, Kemble, Pearson, Stubbs—have never adopted the positions of partisan writers like Palgrave and Freeman. In opposing what, adopting an unhappy phrase of Robertson, he calls the theory of displacement, Mr. Burns mistakes the view of Burton and other writers in a way which seriously affects the value of his own work. It has never been supposed that the Celtic population of Scotland disappeared except from Lothian, where scarcely a single Celtic name has survived south of the Lammermoors. No other district is without them, and even now Gaelic is spoken over more than half Scotland. What cannot be gainsaid is that although the kings of Scotia derived their most ancient titles from the monarchs of the two Celtic races, yet at least after Malcolm Canmore married Margaret in 1070, the Anglo-Danish Lothian, permanently united to Scotland by the victory of Carham in 1018, if not earlier, became the centre of the kingdom, the Teutonic language dominant, and Teutonic institutions the basis of those to which all Scotland by degrees submitted, so that now it is with difficulty that a few traces of Celtic customs (never as in Wales and Ireland reduced to written laws, or, with scanty exceptions, embodied in written chronicles) can be discovered. Hence Mr. Burns has failed to see, what Mr. Murray in his admirable work on the Southern Dialect of Scotland truly points out, that the War of Independence, although it created the Scottish nationality of after times, was in its essence the struggle of the last surviving bit of Anglo-Saxonism to preserve its freedom from the Norman yoke. As regards the war itself, Mr. Burns has studied the original authorities with diligence, but too often interrupts his narrative to quote or controvert modern historians. He brings out with clearness that Edward's attempt to incorporate the northern part of the island in a British empire was a new thing. The short-lived supremacy of Athelstane, of Canute and of William the Conqueror was wholly different. The treaty of Falaise was surrendered by Richard I. Edward himself had formally renounced, by the treaty of Brigham, the claims he afterwards asserted. This king is certainly entitled to be called, as regards England, "the greatest of the Plantagenets," but as regards Scotland he was what he described himself on his tomb, "Malleus Scotorum." Mr. Burns has also well contrasted the Scotch leaders of the earlier and later period of the war: Wallace, who fought for liberty; Bruce, who fought for a crown as well. The concluding chapter, which treats of the results of the War of Independence, though in some points overdrawn, ought to be perused by those who idly regret that Scotland was not united to England in the thirteenth century, as well as by politicians who favour now a centralising policy. It is pleasant to direct attention to the fact that this solid work proceeds from the Glasgow press, which has hitherto done too little for historical studies.

Æ. J. G. MACKAY.

Hampton and its Students. By Two of its Teachers. (New York: S. P. Putnam's Sons, 1874.)

THE four millions of coloured people who have been suddenly put on political equality with the Americans will long continue to furnish one of the most perplexing problems of the States. Education seems the only possible way of solving it, and how far the negro race is capable of being educated remains to be proved. The writers of this report of Hampton and its Students maintain that the effort has been made among a limited number with success, and they write in "the strong faith that the future of this long-enduring race will yet redeem its past."

A Normal School for the Freed Slaves was founded in 1861 at Hampton, Virginia. "During the term of 1873-4 the number of students enrolled was 226, who for the academic course were divided among twelve teachers, most of them trained graduates of the best Northern schools." The normal course includes language, mathematics, history, natural science, moral science, principles of business, &c.; there are also agricultural, commercial, and mechanical courses:—

"One of the fundamental principles of the school is that nothing should be given which can be earned or in any way supplied by the pupil, and in consonance with this principle, regular personal expenses for board, &c., rated at ten dollars a month, are thrown upon each student, to be paid by them half in cash, and half in labour."

The object is one which enlists equal sympathy from the North and South, and both have given largely for its support—but funds are needed to increase the building, and in the consciousness of a good cause, the writers appeal to the public for help. "Last year," they say, "we had the sorrow of turning away from our doors many an applicant whose only hope lay with us, because our buildings were more than full." The negro boys have proved their earnest wish for education by sleeping out during the coldest weather under canvas in the precincts of the school.

The detailed working of the institution is carefully explained, and the report is written with enthusiasm, and considerable graphic power, rendering it far more amusing and interesting than it is thought right to make our English reports of charitable institutions.

Of the negroes' powers we hear that "they learn with average readiness, and show more than average perseverance, but find their chief difficulty in inability to assimilate the ideas which they receive." Some of the histories of the students are given in their own words, and it is easy to perceive this difficulty.

The sketches of the coloured folk living at Hampton are full of humour and pathos; the following is a dialogue extracted from one called "Incomplete Sanctification," in which a negro is stating his "experiences":—

"When you've got de glory in your soul, you can't help hollerin' and a shoutin'.
"Then as you have experienced religion, Mr.

Jarvis, I suppose you have forgiven your old master, haven't you?"

"It was an unexpected blow. The glow died out of his face, and his head dropped. There was evidently a mental struggle. Then he straightened himself, his features set for an inevitable conclusion, 'Yes, sah! I'se forgub him, de Lord knows I'se forgub him, but'—and his eye kindled as the human nature burst forth; 'but I'd gib my oder leg to meet him in battle!'"

An old negro woman relates how her fourteen children had been sold away from her, and what her feelings were, when, at the time of the war, she saw the Union flag hanging across the street, a sign that deliverance was at hand:—

"An den I spreads out my two arms wide—so—an I hugs dat ole flag up to my bress—so—an I kisses it, an I kisses it, an I says, 'Oh! bress you, bress you, bress you! Oh! why didn't you come sooner an' save jes one ob my chillen!' an' den de Yankees come a marchin' up de street wid de band a playin', an' de people a shoutin', and I was cryin' so I couldn't see nuffin, tell all at once I membered what my ole missis tell me, an' I wiped my eyes, an' looked to see ef dey did hab horns for sartin'."

But perhaps the most characteristic sketch is that of the coloured preacher, Father Parker. Negro ambition seems to have been fully satisfied when he headed the procession in Norfolk on the day when the Emancipation was proclaimed in 1863.

"I went and headed dem coloured people, a ridin' in dat yer carriage, a settin' back on dem yer cushions. An' I sot back—so—an' I lifed up my eyes, an' seed de Union flag a wavin' an' a wavin' ober my head—so—an' de music a playin', an' de people a shoutin', an' I said, 'Oh, Lord! can dis be me? ol' Bill Parker, slave forty year—a settin' back in dis yer carriage, on dese yer cushions, wid de ol' flag a flyin' ober my head, a ridin' along at de head ob dis percession of free men?' An' I sot back!"

The latter part of the book is filled with cabin and plantation songs, some of which are sung by a band of Hampton students, called the Jubilee Singers, who are sent about to give concerts in aid of the funds of the school. The songs are most of them curious, and to our English ears somewhat ludicrous. The negro melody is occasionally very sweet, the negro theology is decidedly grotesque; this is an average specimen of the camp-meeting hymn:—

"O saints and sinners will you go?

See de hebbently land—

I'm gwine up to heaven for to see my robo.

Gwine to see my robe and try it on;

It's brighter dan dat glitterin' sun.

I'm a gwine to keep a climbin' high

Till I meet dem angels in de sky,

Dem pooty angels I shall see;

Why don't de debbel let me be?

I tell you what I like de best—

It is dem shoutin' Methodess.

We shout so loud de debbel look

And he gets away wid his clooven foot.

See de hebbently land."

Whatever is essentially good in the negro music will probably live, and may be reproduced in the music of the future, but we cannot be surprised that "the negroes themselves despise these songs, as a vestige of slavery."

F. M. OWEN.

NEW NOVELS.

Holding Fast and Letting Go. By Brudie Brudie. (London: Simpkin & Marshall, 1874.)

Mary Grainger. By George Leigh. (London: Samuel Tinsley, 1874.)

Wandering Fires. By Mrs. M. C. Despard. (London: Samuel Tinsley, 1874.)

MR., MRS., OR MISS BRUDIE BRUDIE (for the reduplication quite prevents the possibility of discerning this author's sex or condition) has written a novel which in hot weather may be productive of innocent pastime. It is true that it is not possible to take the slightest interest in the story, and that the characters are uniformly silly; but the language of the book is a decidedly curious survival of the Laura Matilda class and period, and the names of the personages are delightful and ennobling to read. Violet Vivien, Lionel Harcourt, Stanley Wyldish, Inah Dallingscourt, and many more, form a group which the truly aristocratic taste, weary of Brown and Jones, cannot too much admire. The style, too, in which these personages talk and are talked of, is very soothing. Mr. Micawber educated under the personal superintendence of Miss Pinkerton could scarcely surpass it. "I shall continue my teaching" says a young lady to a young gentleman "with the admonition, that the excitement of gambling must not be resorted to as an antidote, after such an effort of self-denial as you have just described." Shortly afterwards the lady "engages herself in rendering more secure the fastening of one of her ornaments." She wears a widow's cap—"her hair was still partially concealed by a soft white covering," and so forth. We should recommend to Miss Brudie—if Miss she be—the study of the *mot propre*. When she next writes a novel, let her go sternly through it chapter by chapter, and turn every agricultural implement into a spade: after this process she may be readable. This is the story. Violet Vivien is a young widow with a child and an embarrassed property, which her husband's friend Stanley Wyldish is trying to nurse for her. He is a better steward to her than to himself, and gets into a complicated scrape of gambling and flirtation with the Dallingscourts, brother and sister. But of course it all comes right and Wyldish marries Violet, or at least is about to do so when the book closes. There is a modified villain who tries to spoil the match. This is Major Harcourt, a foolish and unskilful villain, who finding himself quite unprovided by nature with the brains required for villany, very wisely repents. He has married a wife who does not love him until she finds that he loves somebody else. Then she begins to love him very much. We have much pleasure in recommending this expedient to all Benedicts who are dissatisfied with the amount of affection they obtain from their wives. But we should not like to guarantee invariable success.

Very much the same moral is illustrated in *Mary Grainger*. John Brown, the son of a rich manufacturer, having taken orders and married early, is established by his father in his own immediate neighbourhood as a sort of squarson with a large income

and nothing to do. Starting with a good deal of enthusiasm for his wife and his profession, he gradually gets disgusted with both—with his profession because he does no real work in it, and with his wife because she cares for nothing but endless gaieties. At last, when idleness, fullness of bread and disgust have brought him into a thoroughly unwholesome and tindery condition, he meets Mary Grainger, a girl who is in a somewhat similar state of mind from very different causes. She is the daughter of an army tailor and moneylender, who has brought himself and his family to ruin by gambling, drink, and general slipperiness. Brown and Mary fall in love with each other almost at first sight, and after certain adventures elope together, and live in a sort of bower of bliss at Torquay, as Mr. and Mrs. Radcliffe, Brown having first made a disposition of his property, by which he gives the bulk of it to his wife absolutely, settles ten thousand pounds on Mary, and leaves himself nothing. The pair of course discover that they are not quite such a heaven-made couple as they thought, and after not a few vicissitudes they part, Brown finally returning to his wife, who has been sobered by the shock of his leaving her, and kills many fatted calves for his return; and Mary meeting on Westminster Bridge a wildly improbable Earl of Belhaven, who installs her in his house (on a strictly proper footing), and leaves her two thousand a year, which she devotes to good works. The story into which Mr. Leigh has worked up these materials, is with very many faults and shortcomings a story of remarkable power and interest, especially in the portraiture of Brown. The effect of accidental luxury and culture on a somewhat ordinary nature, exciting rather than developing the intellectual faculties, and disorganising the moral, is admirably rendered, and the commonness of the type nowadays gives it additional interest. There are strokes of unusual power in the description of Brown's alternate attraction to and revulsion from Mary, and of his positive fear of discovering that his wife's affection for him does exist, after he has made up his mind that it does not. If Mr. Leigh will work patiently, and not trouble his head with moral theories (to which from his preface he seems a little addicted), he ought to do well. His book has many of the characteristics of the early work of a novelist of talent, possibly of genius.

It is, we think, a very short time since Mrs. Despard's last (and first) novel appeared. Unless, therefore, this writer, according to the fable current of Victor Hugo, keeps supplies of novels ready written, to be issued at such times as may please her, we may mourn an addition to the list of quarterly novelists. An optimist reviewer might perhaps congratulate himself on having got the reading of *Wandering Fires* over, instead of having it to come. Although apparently written with some care, it is terribly wearisome and uninteresting. Mrs. Despard has not succeeded in clothing with any fresh interest our ancient friends, the beneficent middle-aged authoress, the pompous clergyman who bullies his wife, humbugs his congregation,

and likes his dinner; the fiendish golden-haired governess who disturbs the peace of families; the wily foreigner who speaks all languages, has unholy ideas on the subject of matrimony, and keeps a gang of cut-throats on the shore of the Aegean so as to be handy when wanted. All these personages are put through violent exercise; but whether they start up in bed, writhe in agony, or drink "old port," at odd times in the middle of the day; whether they endeavour to murder each other, go through perfectly unintelligible scenes in bedrooms (vol. ii. p. 160), or retire to lunatic asylums (the only one of their proceedings which has merit of congruity), they are always tedious and uninteresting to the last degree. It is a pity that so much labour should have been spent to so little purpose.

GEORGE SAINTSBURY.

CURRENT LITERATURE.

Wayside Notes in Scandinavia. Norway, Denmark, Sweden. By Mark Antony Lower, M.A., F.S.A., &c. (London: Henry S. King & Co.) Mr. Lower, who does not even profess to know any Scandinavian language, went by sea last summer to Copenhagen, and, being unwell, returned by sea to London in the course of a week or two. Into Sweden he allows he did not go, and, in spite of some very sly passages, we can safely assert he has never looked on Norway. His knowledge of Scandinavia is absolutely confined to a short stay with English people in Copenhagen and its environs. Mr. Lower, however, has described, vaguely but at some length, both Bergen and Christiania. In each description there is only one expression that is not obviously taken out of a book. In his account of Bergen, however, he says, "The inns of Bergen cannot be commended, as they are neither comfortable nor cheap." This staggered us; it seems so very like original observation. But, turning to Murray's *Guide to Norway*, we found this sentence: "Inns—not well kept, and dear." In Mr. Lower's description of Christiania occurs this passage: "A curious octagonal church of brick. . . . It looks more like a chapter-house than a church. It is covered by an immense dome of brick, and even the groining ribs are of the same material." Murray's *Guide* says: "This is a very large octagon . . . covered with brick. . . . This octagon is covered by a brick dome, resembling the roof of some of our best chapter-houses. . . . All the groin ribs and arches are of brick." Mr. Lower has not been to Norway, yet he pretends to describe its towns. This is very disingenuous!

This book is absolutely worthless, except as a work of humour. Judged as a funny production, it has its interest, but as a serious piece of writing it is of that class, now happily rare, where nothing that is new is true, and nothing that is true is new. Being entirely ignorant of the Danish language, Mr. Lower has been forced to compile his book from Murray's *Guide to Denmark*, and Professor Engelhardt's *Guide Illustré*. Paraphrases from these two works occupy about four-fifths of the volume. When Mr. Lower quotes a name not found in these books, he almost invariably spells it wrong. He writes "Frederits" for "Fredericia," "Fredericksal" for "Frederiksdal," "Jorsalalare" for "Jorsalfar," "Breum" for "Byrum," and plenty no less monstrous. He sees "a pretty shop for what the Danes call *tobakk*," and tells us that they call a bookseller *bog-handel*, which really means a book-shop. He ekes out his remarks with no less than 42 (out of 277) pages of totally irrelevant matter from a lady's MS. translation of Jonas Lie's *Den Fremgaaende*.

But a few sentences culled at random will give the best idea of Mr. Lower's style and sentiments:—

"I will never acknowledge William as an Emperor, nor Bismarck as a Prince, for neither of them has a rightful claim to such a title."

"After a few hours in the North Sea we saw the most glorious sunset that eye could rest on, and I distinctly saw a portrait of the head of my little Chinese dog, 'Ching.' Even Turner in his wildest imaginings could never have touched that scene."

"In 1814 Denmark was compelled to cede Norway to Sweden, but why I never could understand."

"The Danes call their great national meetings 'things,' and so I think they are" (sic).

"Most of our manufactured articles are the result of what people call accidents; but I believe that they were given to us by the Providence of Almighty God. Take glass for instance."

"This sculpture is no doubt emblematical of something."

"It is perhaps too much a fault of mine to digress; but when in a writing humour I cannot help myself."

"The Isle of Zealand, which impinges on Copenhagen (!) is variously spelt . . . and the New Zealand of the southern hemisphere is named after it."

This last statement is exceedingly original.

Little Sealskin and other Poems. By E. Keary. (G. Bell and Sons.) The poem which gives its name to the volume is founded on the well-known legend, the counterpart of which Matthew Arnold has used for his "Forsaken Mermaid." Miss Keary adds nothing to her theme except perhaps quaint homely vivid detail; and her metre is formed on a corrupt following of "Goblin Market." "Snowbell," a more original treatment of the "Enchanted Maiden and the Seven Dwarfs," though the metre is even more ragged, would be pretty if it were not too incoherent. We want the author to supply the unity which the fantastic subject does not. Some dramatic lyrics like "Two" and "Theodora," would be moving if they did not presuppose too much. The most important thing in the volume is a correspondence between two friends, one of whom has turned Catholic and Carmelite, the other is inclined to turn Comtist and Communalist. It looks as if it were taken direct from life, and has all the clear-sightedness of emotional sincerity, though the metre is unusually aggravating. It turns upon the question whether it is selfish to be a nun or a Christian, and the Carmelite is allowed the last word with a vision suggesting that the religion of the Cross is still the highest expression of Welt-schmerz. Miss Keary is a very difficult author, partly through mere crudity, partly through a passion for experiments in search of metres favourable to directness: if she has force enough to accept the familiar conditions of art—she has not force enough to transcend them—she may yet make her mark.

Poems. By Meta Orred. (London: Smith, Elder & Co.) Miss Orred and Miss Keary would make a poetess between them. Miss Keary can think and feel and imagine: Miss Orred can write. Several classic things at the beginning are tolerable echoes of Tennyson's "Tithonus"; the most original thing is "The Dying Monk."

The Psychology of Scepticism and Phenomenalism. By James Andrews. (Glasgow: Maclehose.) This essay is one more attempt to escape from the extreme consequences of any concession to Berkeley's idealism. The writer objects to the theory of unconscious mental modifications, which followers of Hartley have been constrained to adopt, that an unconscious state is merely a state which exists, but is not known (to the subject?) as existing. Animals without a cerebrum, idiots in whom the cerebrum though present is functionless, are supposed to have sensible perceptions, but not consciousness, because they do not know them as really differentiated; while the truthfulness of the experience of the sane is verified by the correspondence of unconscious memory with conscious perception. The connexion between this view and the light thrown by physiology on the localisation of senses is discussed cursorily and without much method.

Contemporary English Psychology. Translated from the French of Th. Ribot. (London: King & Co.) We are late in noticing this text book, in which students will find a fairly candid and intelligent analysis of the opinions of Messrs. Spencer, Bain, Lewes, and the Mills, father and son, with a digression to Samuel Bailey and a few pages on Hartley. The fault of the volume considered as an introduction to the study of psychology is that the exposition of the individual views of these representative writers is not supplemented by a clear independent statement of such of their common principles as the author thinks of vital importance. The introduction is merely a recommendation on general grounds of the application of the "objective" method to mental science, and it is not free from inaccuracies of expression which might be accounted for by carelessness, but look at least as much like ignorance.

Cassy. By Hesba Stretton (London: H. S. King & Co.). Hesba Stretton's writing is always vigorous. She has a quick eye for the picturesque, and writes naturally and with feeling. The scene of *Cassy* is laid in Epping Forest, and the heroine is a little London waif, who runs away from a cruel father, and takes refuge with a misanthropic dwarf who lives in a caravan. The descriptions of the forest life, and of the situation which *Cassy* obtains at a shaving saloon in London are both graphic, but it seems rather a pity that the author should try by the aid of John Bunyan and the Apostles' Creed to solve all theological difficulties between these two pretty little blue covers. It is impossible to think that Simon the dwarf gave an entirely conclusive reply to *Cassy's* question in regard to the dogmas of Christianity; but it was wisely done to show that in his love and care of the stray child, he made his nearest approach to a knowledge of the Divine.

Alice de Burgh: a Home Story for Girls. (London: Virtue & Co.) This is probably the work of a very young writer, who may be deluded by the pretty binding and charming type in which Messrs. Virtue have got up her book, into thinking that she has "a turn" for authorship. She ought to have torn up *Alice de Burgh*, and, possibly, two or three other efforts which might have followed it.

The composition is of the thinnest kind; the story is harmless, what there is of it, and the incidents are good, and might have made an interesting tale but for the exceeding triteness of the writing. The good intention of the book is undeniable, as may be seen in the following sentence, but it is a pity that good intentions will not teach grammar:—

"Margaret had yet to learn that the first object of interest to her ought to be her home duties; and that learning, although well enough in itself and when God has given the talents it is right to make use of them, still it was not right to make learning her only aim in life, and it was more wrong still to put it forward as a reason for neglecting to study and practise all that is needed to make those around her happy, so that in the future she might know how to do those many little services and occupations which make a home look bright and happy, and which none but a woman's hand can rightly perform."

The illustrations are pretty, but they have nothing whatever to do with the story, and the most amusing thing about the book is the ingenious way in which they have been connected with it.

EDITOR.

NOTES AND NEWS.

MESSRS. GEORGE ROUTLEDGE AND SONS and Mr. L. C. Gent promise us a new edition of Hogarth's Works, to be published in about thirty monthly parts, which will contain nearly seventy more plates than any former edition. The text will be based on that of Nichols and Ireland, but much new matter, biographical and anecdotal, illustrating many of the real characters delineated

by Hogarth, will be incorporated. There will also be a life of the artist, containing much new information. Mr. James Maidment is to be the editor.

THE reception of M. Alexandre Dumas at the French Academy is fixed for a day within the first fortnight of January next. The reception of MM. Mézières and Caro will follow; and after the last of these ceremonies the Academy will elect a successor to the chair of Jules Janin.

DR. R. FISCHER's edition of Hemachandra's *Prakrit Grammar* will be published in two parts. The first will contain the text, the critical apparatus, a complete index of all words occurring in the grammar, and an alphabetical list of the sūtras of Vararuchi and Trivikrama. The second part will contain the commentary, with notes explanatory of the text, and examples from Prakrit works.

WE are glad to hear that four hundred of the 576 pages of text of the first volume of Mr. Arber's *Transcript of the Registers of the Stationers' Company* are printed off, and that the volume will probably be issued in October. About half the third volume of the *Paston Letters*, edited by Mr. James Gairdner, is also in type.

IN the Archives at Brussels are preserved several volumes of the correspondence between Juan de Nocolalde, the Spanish minister at the Court of Charles I., and the Cardinal Infant. The first two volumes are especially interesting from the light they throw upon the secret agreement which was proposed between England and Spain for the use of the ship-money fleet, and upon the cause which led to the abandonment of that agreement, namely, the complete inability of Spain to find the sum of 50,000*l.*, which was to have been advanced to Charles. During this period, in fact, Charles had taken up his father's policy of expecting the recovery of the Palatinate from Spain, which he had combated so warmly in earlier life. Nocolalde was far from being a man of Gondomar's abilities, but Charles seems to have been less difficult to manage than James, and in Portland, Cottington, and Windebank, the Spaniard had supporters who never failed him.

MANY readers will have heard with much regret of the death of Mr. Sydney Dobell, which took place last Saturday evening, at his house, Barton End, near Nailsworth, Gloucestershire. Ill health had for many years prevented him from pursuing with any steadiness or strenuousness the career of literature, and thus his name, which was made especially familiar twenty years ago by the publication of *The Roman* and of *Balder*, had dropped out of the common talk of literary society. Both these works commanded great attention from a large public, and the merits of both as works of literary art were somewhat fiercely fought over. We have lately been told that it is not the province of a work of art to excite the contest of different opinions, but rather to produce an harmonious pleasure. But the art of poetry, especially in its most original manifestations, has generally produced contest as well as delight. Nevertheless, there are certain minor poems of Mr. Sydney Dobell's about which contest of opinion is impossible. His weird, extraordinary ballad, *Keith of Ravelston*, with its significant refrain, is one of those little works which will live longer than most large ones. And some among the war poems, dealing with incidents of lowly life, strike a strong and deep chord, and express, as few things in modern literature express, the emotions of a people in war time, with the continual clashings of patriotism and of personal grief. Mr. Dobell was an intense patriot; very much a Conservative, but very much more an Englishman. Almost to the last he took the keenest interest in all that was passing in the world of politics and literature. He dies, prematurely, as a middle-aged man. This is hardly the place in which to speak of personal qualities which immediately commanded, in all who knew him, some feelings warmer than respect.

We have received *Anticriticism, or How Some one hit the nail on the head*. A friendly dialogue, by Professor H. Steinthal. ["Antikritik. Wie einer den Nagel auf den Kopf trifft. Ein freundschaftlicher Dialog."] (Berlin, 1874.) This pamphlet contains Professor Steinthal's reply to Mr. Whitney's strictures. It is a severe punishment inflicted by a German on an American scholar, such as has seldom, if ever, been known in our literary annals. For years it has been a matter of surprise to many people that Mr. Whitney should have been allowed to pursue his extraordinary course with impunity. He evidently imagined that the easiest means of gaining a reputation was to attack other scholars, and to challenge them to a pugilistic combat. He apparently did not understand why they shrank from an encounter with the American champion. He became more defiant and offensive with every year, and he has now at last obtained his heart's desire. We do not defend the tone which Professor Steinthal has adopted in his reply, though there seems to be but one opinion among unprejudiced persons, that the extraordinary behaviour of the young American scholar would have been an excuse for almost any reprisals. But however that may be, if Professor Steinthal thought that Mr. Whitney's proceedings, encouraged as they were in American and German newspapers by a few not quite disinterested writers, were doing real harm to the cause of that science to which he had devoted the whole of his life, we believe that he might have produced a much more salutary effect by showing his indignation in severe, but measured terms. Facts tell more than words. Professor Steinthal might have been satisfied with showing that Mr. Whitney had either not read his books, or, if he had, had not understood them. He might have complained of his misrepresentations, and exhibited the shallowness of his knowledge. But what is to be gained by mere abuse? On every page, as we read on, we meet with expressions such as, "the horrible humbug," "the vain man, who only wants to be named and praised," "the scolding flirt," "the tricky attorney," "the man who harks against the spirit of our classics in poetry, philosophy, and philology." What he writes, we are told, are empty bubbles, jesuitic insinuations, full of impudence, deserving a flagellation. A climax is reached in the following sentence: "Everywhere when I read him, hollow vacuity yawns in my face, arrogant vanity grins at me." Other words, such as *Tolpatsch*, *Geck*, *Lügner* must remain untranslated, and they certainly would much better have remained unwritten. When will scholars, and particularly students of language, learn that rude and offensive words do much less harm to those to whom they are addressed than to those out of whose mouths they proceed?

MR. J. E. SOLKINSON, an English subject residing in Hungary, has just published at Vienna his translation of Shakspeare's *Othello* into Hebrew, with a critical introduction by Mr. Peter Smolensky, the editor of the Hebrew periodical *Haschachar* (Aurora), at Vienna, and author of various Hebrew works. Mr. Solkinson was already favourably known by his translation of Milton's *Paradise Lost* into Hebrew; and his present version of *Othello* is very highly praised by Mr. Smolensky, who contends that it is the best translation of the play into any foreign language.

DR. ROBERT DAHLMANN, of Bonn, is to join Mr. Edmund Brock in editing *Cato* for the Early English Text Society, and is to contribute to the work an essay on the different versions of the famous Distichs of the Middle-Age philosopher, and their wide diffusion through the literatures of all the countries of Middle-Age Europe. To Mr. Brock's already prepared texts—two Anglo-Saxon, two Early-English, and one Old-French—Dr. Dahlmann will probably add a third and different Early-English version, and a second Old-French one, besides a Latin one, from the MSS.; and he will collate for each all the accessible manuscripts.

Dr. Dahlmann is a pupil of Dietz, Delius, Simrock, &c., and also a second-lieutenant in the Prussian army, in which he won his promotion during the late war.

THE Early English Text Society prize in the University of Mississippi, was won by Mr. Thomas Walter Stockard, of Torondos county, Mississippi, who got ninety-nine per cent. of the marks given for his paper. Honourable mention was also made of Mr. Wm. Addison Alexander, of Kosciusko, Mississippi, whose paper was less than one per cent. below that of Mr. Stockard.

THE small University of Jena seems to be bent on reviving the literary traditions which have given it so high a place in German literature. Not only has it set on foot an excellent Review of current learned literature, which proves a formidable rival to the *Centralblatt*, but it is on the point of starting a new organ of scientific theology in its widest sense, to which most of the leading liberal theologians of Germany and Holland have promised contributions. The title is to be *Jahrbücher für Protestantische Theologie*, and the editorship divided between Drs. Hase, Lipsius, Pfeleiderer, and Schrader, members of the theological faculty at Jena. Subscription price 5 thalers, or 15s., a year.

THE Russian Minister of Public Instruction has sent Dr. Harkavy and Dr. Stark to Tchufut-Kalé to examine the MSS. of the late M. Abraham Firkovitch, whose death we announced some weeks since, and to buy them for the State if they think proper. They are now said to number not less than 5,000.

It appears that there is a Society in Italy for the suppression of bad books, which in its fourth report expresses great indignation against the *Rivista Europea* for having said that too many of its members would exclude all books but the Catechism, the Office of the Madonna, or at most, the Book of Dreams. The *Rivista* naturally finds it hard to be called to account for what was a mere vivacious expression, not to be taken in a literal sense. From the conduct of the Society in this instance it is clear that the feminine element in the Italian character does not stop short of inability to distinguish between an illustration and an argument.

A VOLUME of notices and papers relative to the funeral obsequies of F. D. Guerrazzi has just appeared at Leghorn, the proceeds from the sale of which are to go towards the subscription for his monument.

THE new Director of the Archives at Milan is proceeding rapidly with his catalogues. Four-fifths of the documents are already inventoried, amounting to about 250,000 portfolios, cartons, &c. The second part of the third volume of the *Documenti tratti degli Archivi*, coming down to the year 1445, is published, and the documents, bringing them down to the death of Filippo Maria, are ready for printing.

THE following note on an autograph of Milton, by Dr. Ingram, of Trinity College, Dublin, in *Hermathena*, 1873, p. 248-9, deserves a wider circulation than it has yet had:—

"Very few, I believe, are aware that the library of Trinity College, Dublin, possesses a most interesting autograph of Milton. It is in the volume marked R. dd. 39, which contains several of his controversial tracts. At the beginning of this volume is the inscription, somewhat injured in the binding, 'Ad doctissim(um) virum Patri(cum) Junium Joann(es) Miltonius haec sua unum in f(asci)culum conjuncta mittit, paucis h(u)jusmodi lectori(bus) contentus.' The closing words will remind everyone of the 'fit audience find, though few,' of the *Paradise Lost*. Probably in writing the Latin words, as well as the English, he had before his mind Horace's

'neque te ut miretur turba, labores,
Contentus paucis lectoribus.'

The Junius to whom the volume is inscribed must not be confounded with Junius, the philologist, whose

name was Francis; the person meant is Patrick Young, whose biography will be found in Smith's *Vitae*."

MR. D. C. ELWES, F.S.A., contributes to a local paper the results of a close inspection of the parish registers of Chalgrave, Bedfordshire, which he believes to have been the birthplace of the author of *Pilgrim's Progress*. No entry of Bunyan's baptism occurs in the registers of Elstow parish, while in those of Chalgrave not only is the name very frequently found, but in the year 1626 (June 17) the baptism of John Bunyan, son of William Bunyan, is recorded. This date is indeed two years before that which is usually assigned to Bunyan's birth, but Mr. Elwes considers that this is of no importance, while it agrees better with the age at which he is likely to have entered the army. The Bunyan family was certainly seated at Chalgrave as early as the year 1539 (with which the parish register opens), and it is rather remarkable that the name does not occur after 1628, when, it is suggested, the family migrated to Elstow. There is, however, a strong presumption that John Bunyan was never christened in church, if indeed he underwent the rite of infant baptism at all; and we do not think that Mr. Elwes has so far done much to invalidate the tradition of Elstow having been the birthplace of the great master of allegory.

THE friends and admirers of Professor Georg Waitz, who met at Göttingen on August 1 and 2 to celebrate a jubilee in honour of the great historian, have, at the suggestion of Professor Kluckhohn, resolved themselves into an historical association, which is to meet every fifth year at Göttingen, where it invites its members to assemble in August, 1879.

DR. LUDWIG HÄUSELMANN, in a recent number of the German periodical, *Im Neuen Reich*, has given an interesting report of the fourth annual meeting of the "Hanseatic Historical Association," which was held this year at Bremen, and will take place next year at Hamburg. In the course of the discussion Dr. R. Pauli, who is so honourably known for his intimate knowledge of English history, and for the numerous admirable works which he has contributed to the literature of the early periods of our Anglo-Saxon and Norman kings, read a paper, in which he traced the relations between the English during the wars of the Roses and the Hanseatic towns generally, and Bremen specially. He related in graphic words the contest which had been carried on for years between the English and the Hansers for mastery at sea, and which in the autumn of 1470 nearly culminated in the ignominious defeat and capture of Edward IV., who, when flying from the pursuit of the Lancastrian party, which was supported by Louis XI. of France, was intercepted in his flight to Holland by the ships of the Dantzigers, and only escaped falling into their hands through the timely aid of his brother-in-law, Charles the Bold, Duke of Burgundy. It was, moreover, solely through the help of the Hansers, who had been won over to his cause by the intervention of the Burgundian duke, that Edward was enabled, in the spring of 1471, to return triumphantly to his own dominions, in spite of the attempts made by the French King to force the deposed Lancastrian dynasty on the English nation. This circumstance, coupled with the fact that the Hanseatic Leaguers secured favourable terms for themselves by the treaty of Utrecht in 1474, which concluded the war between them and England, sufficiently shows the real significance of the democratic mercantile power which then ruled the destinies of so large a portion of northern Germany, and influenced the entire fabric of foreign diplomacy in the German empire. Dr. Pauli has more than once treated the subject of Hanseatic domination, and from the complicated nature of its influence on our own history under the houses of York and Lancaster, it is one that never fails to interest the

English reader. In the absence of full and sufficient materials in this country for the elucidation of that period of our history, we gratefully welcome any fresh light that can be thrown upon it from the well-preserved annals of the old Hansers, who were in turn the allies and rivals in trade of the English, and we may hope that under the careful investigations of Drs. Pauli, Häuselmann, Mantel, and others, the archives of the old Hanse towns may still be made to yield important results to the history of our own and other countries.

NOTES OF TRAVEL.

WITH reference to the quotation from *La Turquie* in our last number, a correspondent writes to us to say that it is erroneous to attribute a very early date to the cisterns which have been recently opened by Mr. Henry Maudesley (not Mosely). These cisterns are connected with an extensive system of water supply, which has been reported on by Lieutenant Conder, R.E., the officer in command of the Ordnance Survey of Palestine. They are within the scarp, or original line of the defence of the hill, which was discovered by Captain Warren, R.E. Rock-cut steps lead to an unknown depth, down the face of this scarp; and the entrance to the cistern is from a sort of landing-place on these steps. That the date of the cisterns is not anterior to the Roman occupation, at the very earliest, is proved by the existence of a round arch in one of them. The "Moabite epoch" of Jerusalem is a date entirely unknown to the historian.

THE forthcoming September number of Petermann's *Mittheilungen* opens with a continuation of the account of Dr. Bernoulli's travels in Guatemala, in the year 1870. In his progress through the country the Doctor was struck with the frequent occurrence of ruined churches and deserted habitations, and at first thought he concluded that the population had greatly diminished, but on reflection he saw that the real explanation was that here, as in most other civilised quarters of the globe, there is a marked tendency on the part of human beings to settle in and on the outskirts of towns. From Don Yorie Ponce, a wealthy proprietor, Dr. Bernoulli elicited some particulars respecting the terrestrial disturbances to which Guatemala has been so subject. For two months they experienced from at least five to six concussions every day, and on some days these actually amounted to thirty and fifty. Animals are apparently wonderfully shy here; though the doctor traversed several uninhabited tracts, the only mammals he encountered were a few foxes, squirrels, and skunks. Still game is to be got with patience. Santa Rosa, which the doctor visited, is about twelve leagues from Guatemala, and from its low situation is a most unhealthy spot. It is garrisoned with a few troops. Other towns were visited by Bernoulli, but the general character of his subsequent remarks does not call for special notice.

An account of the *Challenger's* progress, as compiled from Captain Nares' reports and diagrams, and Captain Davis's articles in the *Geographical Magazine*, next finds place, the cruise of the vessel being followed as far as Tristan d'Acunha. Count Wilczec, the Arctic explorer, contributes a sketch of the configuration and geological structure of Novaya Zemlya, the general scope of the article being to establish beyond a doubt the identity of its formation and character with that of the Ural chain, and the number winds up with a short sketch of the economic progress of Austria during the last quarter of a century.

We learn from the *Levant Herald* that the question of the water supply from Lake Deros is still the subject of eager discussion, and the Imperial Society of Constantinople has decided to memorialise the Grand Vizier on the hygienic defects inherent to the project of supplying Constantinople with water from that lake, and praying

for a competent commission of inquiry into the subject.

ACCORDING to the same journal of August 11, the famine in Asia Minor still continues, causing great misery. Sickness was carrying off numbers of the population, and the prospect for the future was most gloomy.

FROM the month of May last Mount Aetna has been in a state of activity that betokens an approaching eruption. It is nearly five years since the torrent of lava issuing from the principal crater covered the valley of Bova; since September, 1869, the mountain has been quiet. Professor Silvestri has passed two days and nights on the summit of the mountain, and from the phenomena he has observed he believes an eruption is imminent.

THE railway now about to be constructed from Naples to the top of Mount Vesuvius, near the crater, will be 26 kilometres (circ. 16 miles) long; the localities it serves, to the foot of the volcano, comprising a population of 100,000 inhabitants, who provision the markets of Naples. From Naples to the foot of Vesuvius, a distance of 23 kilometres (about 14 miles), the ordinary rails will be used, and the system of traction by means of iron rails (*drotsheil*) will be adopted for the remainder of the way. The second division will be classed into two sections—the one 2,100 metres long, towards Atrio di Cavallo, where will be the drawing machine and the buildings necessary for the railway; the second section, 1,100 metres, will come out a few steps from the crater. The terminus will be sunk 20 metres under the lava. In case of eruption, the current would thus be turned away from the rail, which throughout its whole course will be raised above the level of the soil. Professor Palmieri, director of the observatory at Mount Vesuvius, having observed that the lava, in every eruption, approaches nearer the buildings of the observatory, the opposite side of the mountain will be chosen for laying down the rail. About 250 metres from the projected station at Atrio di Cavallo, Mount Somma makes a spur or projection, of which they will make use to keep all the working stock in case of an eruption. The whole line will be held in communication with the Observatory by means of a telegraph.

The work will be begun at the last section, that is, the part which will go to the top of the crater and spare the fatigue of the ascent. It will not take more than a year to carry out.

THE *Journal de St. Pétersbourg*, under date August 14, mentions the appearance of sharks in such numbers in the Bay of Marseilles as to attract the serious and anxious attention of the municipality of that city. It was decided in council to use every effort to destroy these visitors, by fishing for them from the islands in the neighbourhood.

FROM a report of the English Secretary of Legation at Yeddo, it appears that a law was passed in 1872 by which it was announced that Japan was to be divided into seven educational districts. Each of the inspectors appointed for these districts had the supervision of from twenty to thirty schools, which are respectively classed under the heads of military, high, and elementary schools. Since the promulgation of this law 1,799 private schools and 3,630 public educational institutions have been opened, in which 338,463 boys and 109,637 girls receive instruction. Besides these, 30,000 students attend classes for higher branches of education, and consequently about 480,000, or nearly one-sixtieth of the entire population, are receiving instruction under the new system.

APART from the few miles of railway now open in Japan, we hear that the extent to which, during the past three or four years, wheeled conveyances have come into fashion, is quite astonishing. Both in cities and along the high roads, where wheels can be used, the *jirikisha*, or

wheeled chair drawn by one man, has been substituted for the old *kago*, or litter carried by two men. The saving of power thus obtained is very considerable, for the *kago* with two porters only travelled thirty miles a day, whereas nowadays one man draws the *jirikisha* thirty-five miles in the same time. It is said that a Japanese used to pay 5s. 6d. for a day's journey in a *kago*, whereas he can now have a *jirikisha* for 3s. 6d., the prime cost of the conveyance being about 3l. 10s.

It is proposed to undertake a regular exploitation of the Muncayan copper mines in Manilla, in consequence of some very pure copper (about twelve tons), having been got from them and sold at 17 dols. 44 cents per quintal.

THE Historical MSS. Commission reports that amongst the papers of Lieutenant-Colonel Carew, at Crowcombe Court, Somerset, there is preserved a letter from Queen Elizabeth to the Emperor of China [at that time Wan-le of the Ming dynasty], written in 1596, just after the incorporation of the East India Company. In his collection at Knole Park, Kent, Earl de la Warr possesses two long letters written from Japan in 1618 and 1620, to Thomas Wilson, Esq., one of his Majesty's secretaries; these are described as being "full of information about the country."

A RECENT number of *O Novo Mundo* contains a careful review of a work on Brazilian Anthropology by Dr. Conto de Magalhães, which has just been published at Rio de Janeiro. In this work, which is a collection of papers read before societies, or previously issued in periodicals, the author deals mainly with three interesting questions. Man in Brazil he believes to date back 100,000 years. Some of the native languages he considers to belong to the Aryan family; "it is beyond doubt that Sanscrit has furnished 2,000 roots to the Quichua tongue." He discriminates three types amongst the Indian races. A dark race of great stature (*e.g.*, the Guaicurú of Matto Grosso); a lighter race of medium height (the Charante in Goyaz), and another still lighter and smaller, peculiar to the basin of the Amazons, as, for example, the Mundarucú of Pará. The first he regards as the primitive race, the two others as the result of a mixture with white in pre-historic times. The mingling of the races in more recent days has "produced a mixed race, excellent for its energy, courage, sobriety, constancy, and resignation in the endurance of privation and toil." The influence of the half-bloods on the Brazilian people has been great, and is shown in the language, which, in addition to above a thousand nouns borrowed from the savages, has adopted a good number of their verbs and phrases. This racial mixture Dr. Magalhães considers beneficial for Brazil and for humanity. In the great region called Vão de Paraná no white man can live; sooner or later the marsh fevers overpower him. Here, and in other parts similarly situated, the mixed races flourish. So little is known, comparatively speaking, of the anthropology of the New World, that it is to be regretted that Dr. Magalhães has not chosen a language more accessible than Portuguese.

DR. PHILIPPI states in *Das Ausland* that the boundary treaty concluded between Chili and Bolivia describes the borderland according to the old notions of theoretical geography, which gave the Cordilleras of that region sierras, deep valleys, streams, &c., notwithstanding that he had explained its true character in his published journey through the desert of Atacama. He found a huge plain, on which were scattered isolated mountains, mostly extinct volcanoes, never forming chains, valleys, or passes, but huge clefts often 500 or 600 feet deep, with perpendicular walls, that appeared to have resulted from aqueous action at some former period. At present it only rains about once in from twenty to fifty years. From his description it is evident that a model of this district would look much like certain portions of the moon as seen through a good telescope.

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- GROTHE, H. Leonardo da Vinci als Ingenieur und Philosoph. Berlin: Nicolai. 14 Thl.
- HUTCHINSON, E. The Slave Trade of East Africa. Sampson Low. 3s. 6d.
- LEBOY DE LA MARCHE, A. L'Académie de France à Rome. Paris: Didier. 6 fr.
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A LONDON ALDERMAN'S JOURNAL, 1796-7.

(Continued from page 208.)

"MONDAY, 6 Feb^r. The report of yesterday is no longer to be concealed. On Friday night Henry Trench Chiswell Muilman, Esq. shot himself at his seat (Debden Hall) in Essex. The desperate deed has caused a very great alarm in the mercantile world; for his connections were most important, and before this fatal war, he was ranked among the first merchants in Europe, and few there were more opulent in point of fortune. Speculations of great magnitude, which have embarrassed his circumstances, have been carried on by a Mr. Nantes a junior partner, are supposed to be one cause, but many must be materially implicated in his fall. . . . I dined at the Jewry with 10 in number, the Recorder in the chair, Capt. Mackenzie of the Navy, &c. Mr. William Wilson came in about eight, with whom and Mr. Recorder Callender I eat oysters and scanned men and things till one o'clock. My friend Callender and I never agree, tho' we are always good friends. He is a tooth and nail or, as Alderman Le Mesurier would say, a thick and thin man, so devoted to Messrs. Pitt & Co that there is no arguing with him on any principles of reason, so blind to the slavish doctrines propagated with so much industry and zeal by the tools of government, that he wages eternal war against truth and conviction.

"Tuesday, 7 Feb. 1797. The chat of last night was productive of a promise to dine to-day with Mr. Callender at Mr. William Wilson's, but before I left the York, I received a note informing me that it was the birth-day of Mr. Nutt, which supersedes all other engagements and requiring my attendance at five. At five I was punctual. We had the skull of a very fine cod, excellent cold roast beef, roasted leg of mutton, and a pudding for dinner. The day terminates his 72nd year. When I consider his vast age, his robust constitution, his spirits, his clear judgment, his faculties altogether, his memory & his never failing fund of conversation (tho' we often and almost always differ in public sentiment and political opinion) with his great knowledge of the world of men and of things I do not know within the compass of my acquaintance so extraordinary, so surprising a man. May he enjoy the return of many such days! . . .

"March 1. I forgot to mention that the French landed on the 22nd at a place called Figgard in Pembrokeshire, 1200 or 1500 men from two or three

frigates; but the honest Welshmen turned out armed with pitch-forks in defence of their land and aided by some militia who were at hand, the whole were presently made captives, and surrendered at discretion to Lord Cawdor. The frigates left them. They (i.e. the Welshmen) were commanded by a grey-headed fellow whose name was Tate. With what view these fellows could be there landed and thus deserted is at present mysterious, but the probable conjecture is that they are a banditti of felons whom the French wanted to get rid of; and in that case, we have gained a loss, for while they are here, we must be at the expense of maintaining 'em. We send our felons to a prodigious distance, to New South Wales at a vast expense. They manage these things better in France, by sending their felons to Old South Wales, at no expense at all!

"Friday March 3. The general gloom that pervaded the town was cheered by the arrival of Capt. Robert Calder with the very unexpected news that Sir John Jervis on the 14th ulto (Valentine's Day) had, with fifteen sail of the line only, fallen in with the Spanish fleet, consisting of 27 sail of the line, and by a bold enterprise cut off about one-third of them and after a sharp battle of six hours had the good fortune to capture Salvator Mundi, 112 guns, St. Joseph, 112 guns & two others, with comparatively little loss on our side, viz. 300 killed and wounded.

The maritime history of England does not exhibit so glorious a conquest! Whether the circumstances of the action are considered in regard to the gallantry and skill which were displayed in bringing the enemy to battle, the presence of mind with which the gallant admiral seized on the critical moment, and the science he displayed in pursuing his advantage—the prompt alacrity of his fleet in seconding his efforts, with so little an expense of blood, form altogether such a combination of interesting features as give to this glorious achievement a splendour and importance beyond anything in modern times. This triumph, however, so very unexampled in brilliance, had only the effect to raise the stocks $\frac{1}{2}$ per cent, and that for a very short period. Thanks of both houses were unanimously voted to Sir John, the other admirals, &c.; bells ringing in every quarter, and many a hoghead of wine I dare say was drunk to the health of the Jolly Tars of Old England!

"Wednesday, 8 March. According to the old mode of reckoning, this is the anniversary of my Birth-day, being born as recorded in the Family Bible on the 8th of March, 1750. Forty seven years ago! What wonderful alterations have been exhibited on the face of the globe since that period, and more extraordinary alterations are at hand, or I am no prophet! This is appointed by Government as a day of Fasting, Humiliation and Repentance—that is, in other words, every body who has a horse rides out, and all get the best dinner they can. I do not recollect that the Frenchmen have appointed such a day since the commencement of the war; they mean to do their business first and go to church afterwards. I hardly know what to make of these kind of things or what is intended by them. If it really is a day set apart for serious duty, and all people would join in it, I certainly could have no objection, though firmly persuaded that fasting and praying will not avail in the contest, but such a day appointed, and by us so kept appears to me a mockery of religion and a perfect farce. It is but justice however to the inhabitants of the country to say that they are infinitely more attentive and zealous than the inhabitants of the Metropolis; and the observation is, I believe, not new.

"Thursday, 16 March 1797. On Tuesday died Mr. Ambrose Godfrey at Shaftesbury House, Kensington Gravel Pits, a celebrated chemist in Southampton Street, Covent Garden, and a distant relation of our family; and on the same day died Mr. Pope (formerly Miss Younge), a celebrated actress who made her first appearance in Imogen at Drury Lane in the year 1768. I saw her play the character; Mr. Holland was the Iachimo, and Mr. Powell, Posthumus Leonatus, old Love the Cymbeline. In her line of character—haughty tragedy—she has scarcely left her equal.

"Tuesday, 11 April. On Saturday for the last time appeared the justly celebrated Miss Farren in the character of Lady Teazle, in Sheridan's incomparable comedy of The School for Scandal. No occasion in the memory of the most veteran amateur ever drew together a more crowded house, to take a final adieu

of this accomplished actress now destined to move in the high circle of life as the Countess of Derby!

"Wednesday, 12 April. Paris papers up to the 8th inst., with official details from Buonaparte to the Directory of the astonishing achievements of the army in Italy. In no former part of his career has he displayed more of that skill, enterprise and activity, which have distinguished his command, nor in any part of his former exploits has he been more faithfully served by the enthusiasm, discipline and valour of his troops. . . . Thomas Paine embarked with Mr. Munro for America on the 19th March.

"Tuesday, 25 April. The Morning Chronicle of yesterday was with me at breakfast, which at all times gives a zest to the bread and butter, and I am disappointed when it fails in attendance. It speaks with some confidence of an account having reached London that our gallant ally the Emperor has been *ex necessitate*—finding from the exhausted state of his finances and the clamours of his subjects, tired with the calamities of war, that he is no longer able to withstand the victorious efforts of Buonaparte—in order to save his crown and the hereditary possessions of the House of Austria, compelled actually to subscribe terms of peace without the knowledge of his good brother the king of England; so that poor honest Mr. Bull is left in the lurch at last, as has often been predicted by his best friends. . . . The mutiny of the sailors is over. A Council was held at Windsor on Saturday, when their propositions were agreed to. Their wages are advanced $\frac{5}{8}$ per month, giving them now 1 $\frac{1}{2}$ per diem without deduction, and their provisions to be full weight without leakage or wastage, &c.

"Wednesday, 3 May. Royal Academy opened on Monday, and it is stated as much improved, and so it ought to be before it can be called good.

"Stocks look brisk, 52 $\frac{1}{2}$.

"Saturday 24 June. Midsummer day, and a terrible day truly for the hay. It rained incessantly and very hard indeed for three hours together. I was three hours coming from the Boro' to Kings Arms Yard, stopping at forty different shops for shelter. With difficulty reached Dolly's where I found my friend Parkinson in an attack upon a veal chop, which he did not relish, succeeded by a steak which was the worst he ever tasted, & the wine so execrable that we left a part upon the table. He will never visit Dolly's again for a good dinner. Except in the wine I was more fortunate, but that was a disgrace to the house. My chop was good and so was my steak.

"This day came on the election of sheriffs when Sir William Sterne, alderman of Castle Baynard, and Robert Williams, Esq. alderman of Cornhill Ward were returned duly elected. Lord Lauderdale and Mr. Waddington were proposed, but their attempt to speak was drowned in the clamour of the Hall. Wilkes was rechosen Chamberlain, &c. &c. An explanation arrived from France of what they called a separate peace, which as report says is satisfactory; in consequence of which Lord Malmesbury, Lord Pembroke, and Lord Morpeth it is presumed will immediately set out on their Embassy to meet the French Commissioners at Lisle. . . . My decided opinion is that it will end *in fumo* and the stocks at 45, but I would not be a Bear in speculation expecting such an event!

"Sunday, 25 June. On Friday morning died Dr. Warren, one of the most celebrated physicians in town, at his house in Sackville Street. . . . To Billingsgate, where I amused myself an hour in seeing the Gravesend Boats and the yachts for Margate set sail. I dined in the Boro' with my friend Parkinson *en famille* and in the evening walked thro' some gardens near the Kentish Road at the expense of one halfpenny each. We met & saw a variety of people who had heads on their shoulders, and eyes and legs and arms like ourselves, but in every other respect as different from the race of mortals we meet at the West end of the town as a native of Bengal from a Laplander. This observation may be applied with great truth in a general way to the whole of the Borough and all that therein is. Their meat is not so good, their fish is not so good, their persons are not so cleanly, their dress is not equal to what we meet in the city or in Westminster; indeed upon the whole they are one hundred years behind hand in civilization. I must not however omit their kindness and hospitality, which if to be measured by Mr. Parkinson's standard is at least equal to the best in either of the other cities. We do not agree in politics not-

withstanding, my friend thinking well of the ability and integrity of His Majesty's Ministers and the measures of their administration, and I think they are the most profligate, abandoned and corrupt cabinet that ever presided in the country, weak, impolitic and unconstitutional, having obtained power by the dereliction of every principle of honour and justice, and supporting it by means the most flagitious.

"Monday, 26 June. I dined at Mr. Nutt's, having contributed three as fine mackerel as eye ever beheld, weighing, I should think full 2lbs. each, and which I purchased at Billingsgate for one shilling. We had lamb pie, leg of mutton and a rice pudding. We drank our wine moderately till eight, &c., having scarcely hinted at anything political the whole day. Nothing new or interesting in the more enlarged circle of life, but the Bulls and the Bears had a bit of a struggle, in which I suppose, many were wounded. The stocks vibrated from 54½ to 55½, but left off just as they began, which was 55, leaving the net advantage to the brokers, who may in many instances be compared to the lawyers, who divide the oyster, leaving the shells to their too credulous clients.

(To be continued.)

CORRESPONDENCE.

A PASSAGE IN LEAR.

3 St. George's Square, N.W.

When Lear is about to divide his kingdom between his three daughters, he says to them—

"Tell me, my daughters,
Which of you, shall we say, doth love us most
That we our largest bounties may extend
Where Nature doth with merit challenge?"

Hunter interprets the last line "Where natural and actual affections vie with each other." But surely the meaning is, "Where your natural relation to, and love for me, claim my bounty by deserving it," that is, "among you, my daughters, according to your deserts." And on turning to "challenge" in *Johnson's Dictionary*, ed. Latham, one finds this passage rightly entered under the meaning "claim as due." F. J. FURNIVALL.

AMERICA AND THE STUDY OF ENGLISH.

"University School," Petersburg, Virginia, U.S.:
July 30, 1874.

I notice in the *ACADEMY* of June 6, under the head of "Notes and News," a paragraph in regard to the systematic study of English in the Southern States of America, calculated to mislead English scholars, and which, unintentionally I am sure, does injustice to the successful efforts made in certain institutions in this State to promote the scientific study of English. This paragraph states that

"the Early English Text Society has just added to the list of institutions to which it sends yearly some of its texts as prizes, the first University in the Southern States of North America where English is systematically taught. This is the University of Mississippi, at Oxford, in the State of Mississippi, where Professor J. Lipscomb Johnson has a class of no less than sixty students in Anglo-Saxon, a class which, for numbers, the one professor of Anglo-Saxon in Great Britain at Oxford (old, not new) probably never even dreamt of having in his wildest moments."

I am sure that Professor Johnson himself would have been the first to correct the error in this statement, had he seen the paragraph in question, for he is a distinguished alumnus of the University of Virginia, where there has been a chair of Anglo-Saxon for nearly fifty years. This professorship of Anglo-Saxon, the first in any American college or university, was established just forty-nine years ago by Thomas Jefferson, "founder of the University of Virginia, and author of the Declaration of Independence."

Almost immediately after the late war, and several years before Professor Johnson accepted his professorship in the University of Mississippi, Professor Thos. R. Price, M. A., also an alumnus of the University of Virginia, and afterwards trained in the best German universities, introduced

at the College of Randolph-Macon, in Virginia, the scientific study of Early English. Professor Price's patient teaching of many years has borne fruitful results, while his brilliant lectures on the subject have kindled an enthusiasm among the younger men in the State in regard to this study which promises much for the future.

It may not be impertinent to add that in the higher (private) schools of Virginia, English has been systematically taught for more than five years.

W. GORDON McCABE,
Master of the "University School."

SCIENCE.

THE ARCHAEOLOGICAL CONGRESS IN STOCKHOLM.

THE first general session of the Congress took place in the Knights' Hall on August 7. Count Henning Hamilton opened the meeting by welcoming the foreign members in a French oration. The Count began by reminding the audience that the Congress in Brussels, two years ago, had selected Stockholm as the gathering-place for its next meeting, and had chosen the Duke of Ostergothland to be President. The loss Sweden had sustained in the death of King Carl obliged his brother to receive the guests, not as President of the Congress, but as King of Norway and Sweden. Count Hamilton went on to say that the accident that Sweden stood behind the southern countries of Europe in respect of climate, wealth, and the gifts of nature, gave special interest to Swedish archaeology, since the civilisation that reigned over the whole south of Europe at a time that was prehistoric to the cold regions of Scandinavia, gave us indications of time that it would otherwise have been impossible to attain. For this reason the scholars of the North have had especial success in dealing with questions of the antiquity of man, and the speaker was in hopes that the learned foreigners who had attended the Congress would have no reason to judge that their long journey had been taken in vain. When Count Henning Hamilton had ended his speech, which was received with prolonged cheers, Professor Capellani rose and proposed that the Congress should elect the Count to be its President, which was agreed to with acclamation. Dr. Hans Hildebrand then ascended the tribune and gave a sketch of the history of Swedish archaeology, which was listened to with deep interest. When this lecture was over, the selection of office-bearers commenced. Among the vice-presidents we notice the names of Nilsson, De Quatrefages, Virchow, and Dupont; and amongst members of the council our own countryman, Mr. Evans, Van Beneden, Rygh, and Engelhardt.

In the evening the city of Stockholm gave an entertainment to the foreign guests in the beautiful place of Hasselbacken. When all were assembled, about 600 in number, Baron Ugglas addressed the meeting, and warmly welcomed the learned representatives of the various European capitals. Bertrand, in reply, dwelt on the services Sweden had offered to the cause of science, on the splendid researches of Linnaeus and Berzelius, on the anthropological discoveries of Retzius, who had given the world the first ideas about the history of races, and on the labours of other eminent Swedish savants. Professor Pigorini supplemented this speech with a special reference to the veteran of living science, Professor Sven Nilsson. At the end of the evening Professor Rossander, calling attention to the fact that Iceland was that very day celebrating her Thousand Years' Festival, dwelt upon the place of that island in archaeology.

On Saturday morning the question under discussion was "What are the earliest traces of the presence of man in Sweden?" Unfortunately, Professor Torell, who was expected to deliver a lecture on this subject, was prevented from attending. Baron Kurch took his place, and after his oration, the Danish Minister, Worsaae, remarked that one prominent sign of the progress of archaeological science was that now not only the remains

from different countries were compared, but also the remains from different provinces in the same country, which enabled observers to follow the development of civilisation more surely. From such comparative investigations the speaker drew the conclusion that the arrival of man in Sweden must date from the end of the Early Stone Age. In the afternoon meeting, when Worsaae was in the chair, the question, "Can the precise way in which the trade in amber was carried on in early times be pointed out?" was under discussion. In the meantime, the French palaeontologist Hamy read a paper on the order of succession of the quaternary strata and remains found in the valleys of the Seine and the Somme, together with the Paris basin. On the question of the day Dr. Stolpe delivered a lengthy discourse, in which he dwelt upon the geognostic distribution of amber, and stated that East Prussia is the richest district in the world for this precious substance. In olden times, however, Europe was chiefly supplied with it from the west coast of Jutland. Amber is also found along the whole coast of the North Sea as far as the Zuider Zee, and the production of it in this district was in former times probably far greater. On the English coast amber is but rarely thrown, and it is far from abundant on the east coast of Jutland and among the Danish islands. The trade in amber seems to have taken two directions, the one from the south coast of the Baltic, and the other from the south-east corner of the German Ocean. The inhabitants of North Europe may have received it also from North Germany, Poland, and Galicia. Light is thrown upon the question when amber was first used by man, by the discovery of it in the graves of the Stone Age, in West Gothland; in only one instance it is known from the Bronze Age, while in the Iron Age it was evidently much in use. Dr. Stolpe mentioned that during his investigations upon Björkö he had found over 1,000 grammes of this substance. Italy had received its amber through Germany and Switzerland. According to Pliny the Germans brought amber to Pannonia, whence the Greeks and Romans received it. Various Roman coins proved the importance of this trade in early times. Professor Capellani supplemented the lecture with remarks on the early specimens of amber found in Italy. Among those who took part in the discussion that followed were Wiberg, from Gefle, Professor Virchow, and Mr. Evans.

On Sunday the members of the Congress visited the museums and public collections of Stockholm.

At the meeting on Monday, the 10th, Professor Desor, from Switzerland, presided. The question of the day was: What characterises the age of polished stone implements in Sweden, and can the remains of this age be referred to a single race, or are we to suppose that several peoples were inhabiting Sweden at the same time? During the discussion the King entered and said a few words of congratulation. Proceedings were then immediately resumed, and the King remained a listener to the close. Dr. Montelius gave a clear sketch of what had been discovered in Sweden of the age under discussion. More than 500 graves dating from this period are known, and are mostly situated close to the sea or near the central lakes. It may be broadly said that the age is most richly represented in Skåne, the extreme south of the country; far less in central Sweden, and not at all in the North. The speaker agreed with Professor Worsaae in believing that Scandinavia was originally entered through Denmark and Skåne. In Norway and the north of Sweden a very different race was dwelling at the time, the builders of cairn-sepulchres. Professor Rygh, from Christiania, showed that the results of his explorations in Norway agreed with those of the last speaker in Sweden. He pointed out that the remains in the north of Scandinavia were not of flint, but of slate, and that they were brought there, without doubt, by the Lapps. These northern remains had scarcely been noticed till a year ago; since

then two very important discoveries had been made, one of a grave at Stenkjaer, near Throndhjem, which had a certain likeness to the Danish *kjökkenmöddings*, in which spears, axes, and knives of bone had been found; the other in the Arctic part of Norway, by the Varanger Fjord. The Professor considered that all these remains were left by the ancestors of the Lapps, and that they had never penetrated farther south than the province of Nordland. Although they lived for many centuries in communication with people who used iron, they remained themselves in the practices of the Stone Age till the beginning of the eighteenth century. Norway and Sweden had therefore two inhabiting races in the Stone Age, the Lapps in the north and the conquering people from Germany and Denmark. Bertrand remarked that it was of great importance for European archaeology that the question should be answered how far the reindeer had been a domestic animal in Scandinavia elsewhere than among the Lapps, as the bones of that animal had in many parts of Europe been found in connexion with human remains. Montelius stated that such bones were never found in the Danish *kjökkenmöddings*, but Dr. Hildebrand had met with examples in Skaane. Worsaae resumed the thread of the discussion. He believed that the old war between archaeologists and historians was drawing to a close. At the Congress of Copenhagen it had been shown that the old belief that the Lapps had once possessed all the north of Europe, and had gradually been pushed northwards, could no longer be held. The result of explorations since that Congress had been to confirm the newer theory, and to show that the Lapps had always dwelt where they do now, since had they lived in the south of Scandinavia, some traces of their presence must have remained. The Lapps, therefore, are not the remnants of the earliest inhabitants of that district. De Quatrefages drew attention to the discovery of a cranium near the North Cape that in no way resembled the Lapponian type, and basing his remarks on the traces of reindeer found in Périgord and other southern districts, was still of opinion that the inhabitants of Europe in the reindeer period followed the reindeer as the climate changed, and found themselves at last in Finmark. He believed the cranium he had spoken of belonged to a still earlier race. A sharp contest on this anthropological question between Virchow and De Quatrefages ensued, and then the meeting closed.

On Monday afternoon a *séance libre* was held under the leadership of Dupont. First De Mortinet gave a sketch of an unpublished monograph on Stone Barrows, in which it was suggested that these were the remains of a primeval race who had abandoned their dwellings, which little by little had sunk down and assumed that form. Hamy described the contents of a barrow at Léry, in the basin of the Eure. Lorange characterised the Stone Age in Norway in terms that resembled sufficiently closely those of Rygh in the earlier part of the day. The discussion then turned on the trade in amber, and reverted again to its original point.

On Tuesday, the 11th, a special train took the members of the Congress out to Upsala. A printed list of the foreign members was circulated this morning. It appears that they were 300 in number. France was most largely represented, sending seventy-five; Germany next, with forty-one. Denmark followed, then England, Belgium and Norway. Some distance behind all these in point of numbers came Holland, Finland, Russia, Italy, the United States, Austria, and Brazil, the last with only three representatives. Portugal sent two, Switzerland and Hungary one each. Only Spain, Roumania, and Greece had not responded to the summons. All these strangers took part in the expedition to the tumuli of Old Upsala. The three vast *Kungshögar* or King's Mounds lie on the ridge of a long elevation in the midst of a country so flat that they are prominent

features from all sides; they were long ago called by Rudbeck, by archaeological licence, the graves of Odin, Frey, and Thor, but they owe their renown to the fact that it was here that fealty was paid to Swedish kings in the middle ages. The eastern one, Odin's Grave, was examined in the years 1846 and 1847, when a horizontal passage was dug from one side into the centre. This passage remained open till 1858, when it became needful to fill it up. The tumuli have all been formed by human hands. In the middle of Odin's Grave was found, low down, a kind of floor of hard clay, and on this ashes, coal, and burnt bones, and over it a heap of stones. Over this last came the great mass of sand and clay that forms the tumulus itself. Under the clay floor was found an urn of burnt clay, covered over with a thin splinter of stone. The urn was full of burnt bones. The antiquities found in the rest of the tumulus were a scorched human lower jaw, a lock of hair, remains of bronze ornaments, melted with the heat, glass pearls, bone combs, little iron nails, dog's bones, and pieces of gold ornaments worked into delicate filigree. The western tumulus has been examined this year; a cutting has been made through it from the summit to the base. The character of the interior was found to be in all essential points the same as that just described, except that no urn was found, and that the remains consisted of scorched human bones, remnants of gold and bronze ornaments, threads of gold which had evidently been woven into clothing, glass pots, combs and other objects made of bone, and a little cameo with an amorino cut in it, apparently of Roman work. The gold ornaments have been edged with pomegranates and worked with filigree. The date of the tumulus is now set down at about the sixth century after Christ. The two Professors Hildebrand gathered as many of the visitors as could enter in the hollow cutting of the tumulus, explaining the features of the scene, and pointing out from the summit the myriad smaller tumuli, of which more than 12,000 existed in Rudbeck's time within the circuit of a Swedish mile around Old Upsala. The visitors then examined the little old church with its two runic stones, and then, under the guidance of Count Hamilton, proceeded to the city of Upsala. Professor Mesterton welcomed them to the University, and then, accompanied by crowds of students and citizens, the Congress proceeded to the Botanical Gardens, where breakfast had been prepared for the members. The hero of the hour was De Quatrefages, who was everywhere overwhelmed with congratulations. Amid a storm of cheers he ascended the steps of Linnaeus' Auditorium, and fervently thanked the students of Upsala and Copenhagen for the special honour they had shown him now, and in 1868. Worsaae recounted the great deeds of the patriarchs of northern archaeology, Elias Fries, of Upsala, and Sven Nilsson, of Lund, veterans who now stood side by side among the assembly; and the venerable Nilsson responded amid a tumult of applause. The Congress eventually visited the Carolina Rediviva Library for the purpose of examining the *Codex Argenteus* of Ulfilas, the cathedral to see the grave of Linnaeus, and finally, the collection of antiquities at the Gustavian Palace. Late in the day a special train took the weary but delighted guests back to Stockholm.

Dr. Hans Hildebrand opened the morning meeting on Wednesday, August 12, by reading a dissertation on the Bronze Age in Sweden. It was certain that the Bronze Age was introduced into Sweden, and did not arise in the country itself. In order to discover whence it came, it was needful to see where else remains of the age were found resembling the Swedish. It was accordingly interesting to study the antiquities of Hungary, the Bronze Age of which country had been so scientifically described by Professor Rómer, of Pesth. There appeared to be no visible connexion between these countries, but the Bronze

Age had developed out of a common source in each. Lorange remarked that at the Congress of Copenhagen he had withstood the notion that there had never been a Bronze Age in Norway; and since 1869 fresh discoveries had substantiated his position. It must now be allowed that there are three periods in Norway, as in other countries. Near Frederikshald there were a great many stone tumuli from the Bronze Age, each 10 metres in diameter, and all situated on heights overlooking the sea or some lake. He had lately examined a similar tumulus near Christiania, and found two knives of bronze. Between Stavanger and Bergen existed another kind of tumulus, formed of earth; these contained skeletons, accompanied by ornaments from the first Bronze Age. In consequence it might safely be taken for granted that this form of culture stretched at least from Frederikshald to Bergen. Besides this, only two months ago he had found near Throndhjem a tumulus from the Bronze Age. There were outlines scratched on the rocks which also proved that Norway was inhabited at that period. Five years ago only ten of these were known; now over 200, and all resemble those found in Sweden so exactly that one might believe the same man had made them all. Mr. Evans described the Bronze Age in England. In the English graves of the period bronze swords are scarcely ever found, but rather axes and daggers. Baron Kurek gave the result of his examinations, namely, that the Bronze Age was really confined to the same part of Sweden as the Stone Age, namely, the south. Montelius gave some account of the figures on the rocks. Holmberg was the first to examine them, thirty years ago; but his drawings were inaccurate, and therefore Count Ehrensward had lately had them all copied anew. Those in Bohus Län are quite different from those in other parts of Sweden. Bruzelius had found similar outlines in Skaane, of which he exhibited two drawings. The south-east of that province contained many such. The subjects of the outlines were ships, with and without men, wheels, serpents, sandals, &c. Desor wished to know what likeness there was between these and the figures found on stones in the dolmens, where also serpents are portrayed, and how the drawings had been imprinted on the stone. The Parisian sculptor, Soldi, explained that the bronze was not hard enough to have made these impressions, for which iron, flint, or steel was necessary. Engelhardt gave some interesting particulars of the domestic animals kept by the people of the Bronze Age. Near Kalundborg, in Zealand, a tumulus had lately been examined, containing bones of oxen, sheep, and goats. Virchow dwelt on the direction taken by trade during the Bronze Age. Worsaae and Schaffhausen then discussed the theory of Lindenschmidt that the Bronze Age in Europe went back to the Etruscans, and a letter was read from the absent professor stating his opinion that no bronze or iron implements found in Scandinavia dated farther back than the tenth or eleventh century, a position strongly opposed by Worsaae. Capellani then read a memoir by Count Gozzadini, who was president of the Congress of Bologna in 1871. It treated of some remains found at Ronzano, near Bologna, including a remarkable sword from the First Iron Age. Desor exhibited some photographs of Swiss lake-dwellings of the Bronze Age. The King and Queen were present during the whole of this meeting.

In the afternoon Mr. Franks presided at a meeting for which no particular subject had been suggested. Different members gave accounts of recent "finds." Von Quast described some remains from the Bronze Age discovered between Berlin and Lübeck. Engelhardt described the gold vases lately found in Denmark. They were hammered and adorned with ornaments of concentric rings. The speaker described other remains of the same period, and was of opinion that none of these objects had been fabricated in Denmark, but brought into the country. Mr.

Franks described bronze remains found in Cyprus, in India, and in a passage made into one of the Pyramids. Pigorini described a terramare near Parma, which he had purchased for the Italian Government. Landberg, of Stockholm, gave an account of bronze remains dug out by himself in Cyprus and at Sidon. Hamy read a paper by Aspelin, the Finlander, on the Stone Age in Finland. Count de Saporta gave a minute account of the discovery of a fragment of tufa near Fontainebleau, on which were impressed the outlines of fig-leaves. The remarkable thing was that these leaves seemed to belong to a species now confined to Japan and the Chinese Islands. Dupont considered this was one more proof that the climate of Europe in the quaternary period was warmer and more uniform than in later times, and that it was then that the reindeer, lion, hippopotamus and hyæna existed side by side.

On Thursday, the 13th, four steamers took the members of the Congress, between 600 and 700 in number, up the Mälär Lake to Drottningholm, where the King joined them. The vessels then proceeded up the lake to Björkö, where Dr. Stolpe delivered an interesting lecture on the island itself and the remains found there. The place that had been occupied by the prehistoric city had an appearance so peculiar, that it was locally known as the "Black Ground." Autumn storms swept up amber, masses of coal, stumps of wood, and the heads of mallets along the shore, and, by dredging the lake-bottom, wrought and unwrought amber, wooden implements, glass pearls, bones of domestic animals, and other objects had been brought to light. The graves around the "Black Ground," the largest gathering of graves in Scandinavia, are more than 2,000 in number, and lie closely packed by one another. They all belong to the Second Iron Age, and burnt human bones are found in them, usually laid in an urn of burnt clay, and accompanied by arms and implements of iron, ornaments of bronze, and bones of animals. It has hitherto been believed that the masses of coal and sand found in the "Black Ground" date from a great fire, that must have destroyed the town, but Dr. Stolpe was of another opinion. The many inflammable objects found unhurt, such as elk's horns, bones of animals, and amber, refuted the old theory completely. No traces of dwellings have been found on Björkö, but Dr. Stolpe concluded that they were wattled and thickly smeared with clay. In the "Black Ground" were found coins, many of them rare or altogether new to science, ornaments, weapons, implements, and now and then a little hoard of silver. The ornaments consisted of bronze clasps and buttons, most of them adorned with the dragon so characteristic of the Second Iron Age. Glass pearls, rock crystals, carnelians, agates, amethysts, and amber had also been discovered. Combs and nails were commonest of all. Figure-outlines had been found, but no runes, from which Dr. Stolpe concluded that the art of engraving runes was not so generally understood as had been imagined. Among the natural-historical remains at Björkö were petrifications from Gotland and Skaane, mussel-shells from the west coast of Sweden, and some cowries (*Cypræa moneta*), probably brought from the east with the Cufic coins and silver bracelets. Of animal bones the number was immense, divided between more than fifty species, and all the marrow-bones had been crushed or cleft. The principal wild beasts were lynxes, wolves, bears, foxes, beavers, squirrels, black rats (unknown in the rest of Europe till the thirteenth century), hares, elks, reindeer and harp seals. Among birds might be mentioned the capercaillie and the white stork. About eleven species of fishes had been found. Finally, Dr. Stolpe was convinced, after a careful consideration of all these copious and varied remains, that the city which had existed on Björkö must have been founded in the beginning of the Second Iron Age, in other words, about the middle of the eighth century after Christ. When it was destroyed no

one knows, but probably about the middle of the eleventh century. There were many reasons for believing that Birka itself stood on Björkö, and if so, added Dr. Stolpe, the Congress was now standing on the very spot from which civilisation radiated out into all parts of Scandinavia. The members then re-entered the steamers, and proceeded to Marienfred, one of the smallest of the Swedish burghs, where they again disembarked. The company passed rapidly through the narrow streets to the royal castle of Gripsholm, one of the most interesting of all the palaces in Sweden in point of historic reminiscence. Below the balcony from which the eccentric widow of Gustavus Adolphus, tired of the responsibility of a crown, fled from her too-devoted people, a supper had been prepared for the members of the Congress, and when the antiquities of the palace had been thoroughly ransacked, the four steamers carried their merry freight back to Stockholm. Some English ladies of archaeological tastes distinguished themselves at Björkö by the zeal with which they attacked the little tumuli with great knives, only too delighted if a burnt bone or a Cufic coin rewarded their innocent sacrilege.

On Friday morning De Quatrefages presided, and the subject of the day was the Iron Age in Sweden, and its relation to the other European nations. Hagemans, of Belgium, described a "find" in the province of Namur, where, at the depth of a metre, a vine-stock had been found (*Vitis lambrusca*), together with an antique vessel. The vine no longer grows in that part of Belgium. The speaker proceeded to discuss the significance of the stone heaps and mounds found in that country, and was of opinion that the worship of Baal had prevailed in Belgium, and that Druidism was far later than the Bronze Age. Chantre described some remains of the Bronze Age from the south-east of France, of which he exhibited plates. Bertrand gave his impressions with regard to the different periods known in archaeology as Ages. He especially attacked the divisions of the Bronze Age, because not only did the Bronze and Iron Ages overlap one another, but they had been positively contemporaneous. These Ages did not agree together in time in different lands: in Germany, for example, the Bronze Age prevailed in the fourth century after Christ, while in Italy already eight centuries before our epoch the full Iron Age existed. The cradle of the Bronze civilisation was the Caucasus, and from thence it had spread in different directions, partly through Greece and Italy, partly through Hungary along the Danube. To show that the connexion between these two Bronze periods had been small, the speaker referred to the evidence of Herodotus and other classical authors, which pointed to a distinct boundary between them running through the centre of Europe. The Black Sea formed the point of exit and of union, and the Argonautic expedition was a literal truth. When we recollected the way in which America had received European culture simultaneously from various points, we had a juster notion of how our European civilisation had come from Asia. Hildebrand pointed out that the name of the First Iron Age had a real significance in Scandinavia, because the boundary lines there between the Ages are distinct and easy to define. Evans agreed with Bertrand that it was unavoidable to insist on the divisions of the Bronze Age. Desor considered that the term "Ages" must only be thought of as a phrase to distinguish different waves of culture. Civilisation followed certain rules in its development, and had fixed stages, which we knew as the Ages. As far as the First Iron Age was concerned, it belonged in Scandinavia to the fourth and sixth centuries; but it was of course quite natural that a difficulty should be felt in defining the boundaries between the Ages. He reminded the meeting that when the buildings on piles began to attract attention, it was supposed that only those belonging to the Bronze Age had the slightest interest, while it had now been shown that those from the Iron Age

were both the most numerous and the most important. He was most anxious to have it generally felt that the great object was not to erect hypotheses, but to go forward on the safe path of exact observation. Von Quast, of Berlin, reminded the Congress that it was from Denmark that the doctrinaire division into "Ages" had gone out into Europe, and there, also, the first effort had been made to create rules for the classification of remains. Worsaae was convinced that it was impossible to draw safe conclusions about the chronological succession of the ages in countries where the examination of remains had not been more completely made than, for example, in France. Greece had had a Bronze Age, and the speaker was quite certain that it had also had an Iron Age. The Bronze Age had arisen in Asia Minor, spread itself over Greece to Italy, Gaul and the British Isles. That Scandinavia produced earlier forms than certain other countries was clearly because the Bronze culture had come to it through Hungary and North Germany. Perrin described a "find" of lake-dwellings in Savoy, and demonstrated from them the existence of a fully-developed Bronze Age in France. Leemans stated that the explorations in Holland were so far from complete, that one could do no more than distinguish between Roman and pre-Roman remains. Bertrand explained that he had not meant to deny the existence of a distinct Bronze Age in the north, but only to say that in France and Italy one could not so define the period. In Italy bronze and iron had been contemporaneous. Greece had had an Iron Age from the beginning. Gaul had received its bronze from the north. Even the Druids possessed iron. Since all this was the case, the exact definition of name was inappropriate. Montelius described the spread of the Bronze Age in Sweden. About 2,500 bronze remains were known, most of them from Skaane. However, the geographical distinction between the distribution of bronze and stone remains was great. Whilst of the latter 30,000 had come from Skaane, and only 7,000 from the rest of Sweden, 1,000 bronze remains belonged to Central Sweden, and only 1,500 to Skaane. This showed that the Bronze civilisation had reached further north than that of the Stone Age, but still not beyond the Dal River. Dupont read a paper on the domestic animals of prehistoric times, and showed the difficulty of determining whether the bones discovered belonged to tame or wild species. The speaker dwelt especially on the horse. This animal occurred in enormous numbers in the quaternary period, and probably played the same part in domestic life as the ox plays now, but disappeared for a long time after the conclusion of that period. However, in the pile-dwellings stables had been found. De Baye described the sculptures in the old grotto in Marne from the Stone Age, and exchanged remarks on the subject with Soldi and Ozales de Fondouce. In conclusion, De Quatrefages invited the members of the Congress to visit the International Congress which the Société de Géographie intended to hold in Paris in 1875.

On Friday afternoon Bogdanow presided. Virchow took the opportunity of the visit to Björkö to describe other old prehistoric towns that can be considered as contemporaneous with Birka. After seeing the remains from Björkö, he could perceive the great likeness between these and the various remains from Pomerania. Indeed traces of the same culture could be found from the Baltic as far south as Moravia. Incidental remarks and descriptions were made by Dircks, Pigorini, Schaffhausen, Zawisza, and Franks.

Professor Leemans presided on Saturday morning, when the question of the day was: "What are the anatomical and ethnical features peculiar to prehistoric man in Sweden?" Nothing of very much importance was said until a lecture was delivered by Baron von Düben, in which, after describing his examination of crania of the present inhabitants, the speaker expressed his conviction that the ancient Swedes (Svear) and Goths had

been, not two, but one primitive race. With regard to the crania of the different graves, the speaker mentioned many interesting facts which showed that they had the same form, whether they were from the Stone, Bronze, or Iron Age. The greater length of cranium in the old heads, and other smaller differences, were not sufficient to constitute the characteristic of a distinct race, but were developments to which the modern race were also subject. In fifty skulls he had examined it was scarcely possible to discover more types than in as many modern heads. With regard to the question of a mixed race in Sweden, the speaker advanced many reasons against the adoption of such a view; and finally remarked that, if there had been a mixed race, the differences could not have been so completely obliterated in the short period of 1800 years, which have elapsed since the arrival of the *Svear*, or the three or four thousand years, which is the highest age which can be attributed to the Stone Age in Sweden. The paintings on Egyptian monuments show us that the character of a race cannot so quickly be obliterated. If one assumes that the primitive race of the stone mounds was a single one, the question then arises, was this single primitive race, like the present, the *Sveo-gothic*? This question the speaker was not prepared to determine in the present state of scientific knowledge. Most of the crania discovered were dolichocephalic, a few brachycephalic. Among hundreds which the speaker had examined, only ten were of the latter kind, five of them being from Denmark, and as many from Sweden. They were all found in graves from the Stone Age, and in all probability belonged to another race. These were the crania that Nilsson and A. Retzius described as Lapponian, and it is true that some of them resemble the skulls of Lapps so closely that our present knowledge of craniology does not permit us to perceive any difference. However, there are other data that prove that the Lapps entered Scandinavia round the Gulf of Bothnia, and never have inhabited the peninsula further south than the 62nd degree of longitude. Further facts must, therefore, be collected before any fixed theory can be propounded. Zittel, from Munich, exhibited some flint remains which he had found in the Libyan desert to the west of Egypt, and asked the Congress to decide whether they were formed by human hands. Desor and Hamy were both of opinion that they were, but advised caution in such cases. Engelhardt described the memorial stones, inscribed with runes, which were found in certain Danish and Swedish tumuli of the Stone Age, and asserted that these were never found south of the Ejder, the river that divides Slesvig from Holstein. The art of rune-writing sprang up directly the First Iron Age began, and was the result of the skill in preparing surfaces of stone which the inhabitants of the end of the Bronze Age had developed.

At the afternoon meeting De Baye described some drawings on pottery which he had found in Champagne, and which he attributed to the Bronze Age. Belucci, from Perugia, described the remains of the Bronze Age in Umbria. Lorange delivered a lecture on the Iron Age in Norway, which he divided into three distinct periods, of which the first was characterised by countless tumuli containing burnt clay, white ashes, and bones preserved in urns, and which are accompanied by bronze and iron objects, whilst the second period shows the beginning of Roman influence. In one mound, for instance, a vase has been found bearing a Latin inscription. The third period is marked by the constant occurrence of objects that are either of Roman manufacture or show the influence of Roman culture. H. Hildebrand read a paper by Aspelin, on the forms that characterise the Iron Age in Finland, which gave Desor the opportunity of remarking that Aspelin's drawings are the most satisfactory that any archaeologist has yet produced. Lerch concluded by describing what the University of Helsingfors,

under Aspelin's guidance, was doing for archaeological science. The members of the Congress, 900 in number, then adjourned to the harbour, where five steamers took them up the Mälar Lake to the royal palace of Drottningholm, where they were magnificently entertained as guests by the King and Queen, and returned to Stockholm at midnight.

On Sunday, August 16, at the final meeting, Count Henning Hamilton read an invitation from the celebrated Hungarian, Professor Romer, begging the Congress to determine to hold their next session in Buda-Pesth, and the Count himself and the vice-presidents strongly seconded the suggestion. Capellani and Desor then thanked the Swedish members of the Congress, the city of Stockholm, the University of Upsala, and the Swedish nation generally, for the unprecedented kindness that had been shown to the foreign guests, and remarked that the world-wide fame of Swedish hospitality and courtesy would now be more widely spread than ever. The president then made a closing speech, after which the votes of the company present were taken on the question, What city shall be the seat of the Congress of 1876? A large majority decided for Buda-Pesth; the minority was in favour of Moscow.

EDMUND W. GOSSE.

MEETING OF THE BRITISH ASSOCIATION AT BELFAST.

MATHEMATICAL AND PHYSICAL SECTION.

ABSTRACT OF THE OPENING ADDRESS OF THE PRESIDENT, THE REV. PROFESSOR J. H. JELLETT, M.A., M.R.I.A.

PROFESSOR JELLETT's address as president of Section A, related mainly to mathematics and to optics, the two subjects which are most intimately connected with his name. In the course of his address he said: In reviewing the history of physical science, we may leave out of sight those sciences, or parts of a science, to which the methods and language of mathematics are applicable without the aid of hypotheses. No scientific man doubts the advantage of applying, as far as our analytic powers enable us so to do, the methods of mathematical analysis to such sciences as plain optics or plain astronomy. Even physical astronomy, although in strict logical precision not wholly independent of hypothesis, has been long recognized as, in the most proper sense of the word, a mathematical science. Wherever, in fact, the fundamental equations rest either on direct observation (as in plain optics) or (as in physical astronomy) upon an hypothesis, if we may venture to call it an hypothesis, so entirely accepted as universal gravitation, the extension of the methods of mathematics is only limited by the weakness of mathematical analysis itself. But there are other sciences, as, for example, physical optics, to which mathematical analysis cannot be applied without the intervention of hypotheses more or less uncertain. And if we would appreciate the true character of scientific progress, the question which we must put to scientific history is this, Is science becoming more or less tolerant of such hypotheses? A principle is assumed, possessing in itself a certain amount of plausibility, and capable of mathematical expression, from which we are able to deduce, as consequences and by mathematical reasoning, phenomena whose reality may afterwards be proved by direct experiment. And from this experimental verification we infer, with more or less probability, the truth of the original assumption. The question, then, which we have to put to scientific history is this, Do the records of science indicate a greater or a less tolerance of this kind of logic? Is the mode of physical investigation which I have shortly sketched gaining or losing the favour of scientific men?

Further on Professor Jellet discusses the abstruse subject of molecular mechanics in the following terms: I pass to the consideration of another

branch of science, closely connected with, and indeed including, physical optics, and exemplifying, even more strongly, the desire of scientific men to extend the sway of mathematics over physical science—I mean, Molecular Mechanics. This branch of mechanical science (if, indeed, it be not more correct to say, this science) is altogether modern. Fifty years ago it had hardly begun to exist, and even now it is in a very imperfect condition. Imperfect as it is, however, it has advanced far enough to mark the progress of science in the direction which I have indicated. And as it is a science more general than physical optics, the indications which we can gather from it are more important. Physical optics does not take us outside our own Section; molecular mechanics shows a marked tendency to carry mathematical analysis into the domain of chemistry. If it shall ever be possible to establish an intimate connexion between this latter science and theoretical mechanics, it is probably here that we shall find the connecting link. In truth it is impossible to contemplate the ever-growing tendency of science to see in so many natural phenomena varieties of motion, without anticipating a time when mathematical dynamics (the science which has already reduced so many of the phenomena of motion beneath the power of mathematical analysis) shall be admitted to be the universal interpreter of nature, as completely as it is now admitted to be the interpreter of the motions of the planets. I do not say that it will ever be. I do not even say that it is possible. It is no true philosophy which dogmatizes on the future of science. But it is certain that the current of scientific thought is setting strongly in that direction. The constant tendency of scientific thought is, as I have said, to increase the number of those phenomena which are regarded as mere varieties of motion. Sound—that we have placed on the list long since. Light, though here our conclusions are more hypothetical, we have also long regarded as belonging to the same category; and Heat may now be fairly added; and we have almost learned, under the guidance of Professor Williamson, to regard chemical combination as a phenomenon of the same kind. All these phenomena (of sound, of light, of heat, and perhaps even of chemical combination) we now regard as produced by the movements of systems of exceedingly small particles—whether of known particles, as in the case of sound, or of the hypothetical ether, as in the case of light; and a science which proposes to itself the mathematical discussion of the laws which govern the movements of such systems can hardly fail to play an important part in the future history of physical science. I shall not then, I hope, be thought to misemploy the time of the section by offering some observations on the science of molecular dynamics.

When we have to deal with a science which professes to be more than a mathematical abstraction—a science which assumes to itself the function of representing, with at least approximate truth, the realities of nature—our first question will naturally be, What is the basis on which it rests? Is it built upon a pure hypothesis, not derived from experiment, but seeking to justify its claim to reality by the truth of the results which may be deduced from it?

The word "molecule," as Professor Clerk Maxwell has told us, is modern, embodying an idea derived from modern chemistry. It denotes a material particle so small as to be incapable of subdivision into parts similar in their nature to itself. Thus a drop of water may be divided into smaller drops, each of which is also water; but a molecule of water is regarded as incapable of such division. Not that we regard it as absolutely indivisible; but we assume that a further division, could it be effected, would produce molecules, not of water, but of its component gases, hydrogen and oxygen.

Now this conception of a molecule undoubtedly involves an hypothesis. Are there such ultimate

particles of matter, not only resisting all the dividing forces which we can command, but absolutely indivisible, by any force, into particles similar to each other, or perhaps into particles of any kind? Or are we to suppose that if we had instruments of sufficient delicacy, the process of division might be carried on without limit? Experiment gives us no means of deciding between these alternatives; and if the exigencies of our method of investigation force us to make a decision, we can make it only by an hypothesis. But we may fairly ask, Does the logic of molecular dynamics absolutely require this decision? And on this point I wish to offer one or two remarks. When we propose to determine the motion of a body, solid or fluid, we ought, as indeed in all scientific problems, to form in the first place a clear conception of the meaning of the question which we propose to ourselves. We wish to discover the laws which govern the motion—of what? Not certainly of the body taken as a whole. That is, no doubt, part of the information which we seek, but a very small part of it. When we have learned to determine by a fixed mathematical rule, or formula as we generally call it, the position occupied at any instant by the centre of gravity of the body and by its principal axes, we have learned something, but the investigation is far from being complete. There are, as you know, large classes of movements of which such knowledge would tell us nothing. Thus, to take a familiar instance, you see a man (to use our ordinary language) "sitting quiet." He is at rest, so far as the movement of the body, taken as a whole, is concerned. He is neither turning on his chair nor walking about the room; and yet there is probably not a single particle of his body which is absolutely quiescent. You see, then, how ignorant we are of the vital movements of the human body, if we know only that the individual is "sitting quiet."

Molecular dynamics may fairly be called the differential calculus of physical science. It is, in its relation to physical science, what the differential calculus is in its relation to geometry. As in geometry, when we would pass from the small and exceptional class of rectilinear figures to the infinite varieties of curve-lines, we must invoke the aid of the differential calculus, so when we would pass from the abstractions of rigid solids and unbending surfaces to the contemplation of bodies as they really exist in nature, must we, if we would fully investigate their phenomena, invoke the aid of molecular dynamics. It is the science of that phenomenon which is gradually drawing all others within its sway; it is the science of that phenomenon which, "changed in all and yet in all the same," we have learned to see in every part of nature. Molecular dynamics is the science of Motion in its widest and truest sense—of the motion which passes along in the sweep of the tempest or the fierce throb of the earthquake—of the motion (no less real) which breathes in the gentlest whisper or thrills along the minutest nerve.

Professor Jellett next considers the relationship of Chemistry to Theoretical Mechanics:—

And first, what shall we say of section B? Does chemical science show any indications pointing to a future union with the group already collected under the *genus* (if I may so call it) Theoretical Mechanics? Take, for example, the great problem of chemical combination. Does the treatment of this problem now show any signs pointing in the direction of dynamical science? I desire here to speak with all reserve and even hesitation, being conscious that I am no longer on familiar ground. Still there are signs which even an outside spectator may read. And we may, I think, speak confidently of their direction, although the goal to which they point is far distant and may perhaps be unattainable.

One of these signs is the appearance of *time* as one of the elements of a chemical problem. And in recognising the necessity of a certain time for

the production of a chemical effect, chemists are now pointing not obscurely to the analogy of mechanical science. "Time," says Berthelot, "is necessary for the accomplishment of chemical reactions, as it is for all the other mechanical phenomena." This might not in itself be very significant; but chemists have not merely recognised the necessity of time as a condition for the production of chemical phenomena, they have also undertaken to measure it; or rather, taking the converse problem, they have undertaken to measure the amount of chemical effect produced in the unit of time; and the law of this phenomenon announced by Berthelot takes (necessarily, indeed) a mathematical form quite analogous to equations which present themselves in dynamical science. The next step has followed as a matter of course, and chemists now speak as familiarly of the *velocity* of chemical reactions as engineers do of the velocity of a cannon-ball.

Still more important in its bearing on the future of chemistry, and tending distinctly in the same direction, is the theory of Chemical Combination, which science owes to Professor Williamson, and according to which this phenomenon, like so many others, ought to be regarded as in great measure a mode of motion. We suppose the normal condition of the atomic constituents of a body to be *motion*, not rest; and when we say that a molecule of one substance enters into combination with a molecule of another substance, we do not mean that the same molecules constantly adhere together, but that the union between the molecules, whatever be its nature, is continually dissolved and as continually re-formed. According to this theory, chemical equilibrium does not denote molecular rest, but a system of molecular motion, in which these decompositions and recompositions balance each other.

If I may venture to add anything to that which comes from such an authority, I would say that this theory leads us naturally to regard the chemical properties of bodies as, if not wholly modes of motion, yet largely dependent upon the nature of the movements which take place among their constituent atoms. Hence, if two bodies incapable of chemical action are brought into chemical presence of each other, we may suppose that their atomic movements, and therefore their properties, remain unaltered. If, on the other hand, these bodies be capable of acting chemically on each other, their atomic movements are modified by their mutual chemical presence; and therefore the chemical properties of the compound, as we call it, may be wholly different from those of either of the bodies which have entered into combination.

Now we are not yet prepared to consider chemical combination as a problem of molecular dynamics. We have not sufficiently clear ideas (even hypothetical ideas) of these atomic movements, and of the modifications which are caused by the chemical presence of another body, to place the investigation of these phenomena in the same category with the investigation of the phenomena of physical optics; and I am sure that any attempt to hasten unduly the affiliation of chemistry to theoretical dynamics would be productive of serious mischief. The drift of the remarks which I have made has been only to show that the current of scientific thought is setting in that direction; and while we may not predict such an affiliation, still less should we be justified in pronouncing it to be beyond the possibilities or even the probabilities of science.

The address was concluded as follows:—Let none presume to fix the bounds of science. "Hitherto shalt thou come, but no further"—that sentence is not for man. Not by our own powers, not by the powers of our generation, not even by our conceptions of possibility, may we limit the march of scientific discovery. To us, labourers in that great field, it is given to see but a few steps in advance. And when at times a thicker darkness has seemed to gather before

them, men have recoiled as from an impassable barrier, and for a while that path has been closed. But only for a while. Some happy accident, some more daring adventurer—it may be time itself—has shown that the darkness was but a cloud. The light of science has pierced it; the march of science has left it behind; and the impossibility of one generation is for the next but the record of a new triumph.

If seeming plausibility could give to man the right to draw across any path of scientific discovery an impassable line, surely Comte might be justified in the line which he drew across the path of chemistry. Fifty years ago it might seem no unjust restriction to say to the chemist, Your field of discovery lies within the bounds of our own earth. You must not hope to place in your laboratory the distant planet or the scarce-visible nebula. You must not hope to determine the constituents of their atmospheres as you would analyse the air which is around your own door; and you never will do it. Fifty years ago no chemist would have complained that chemical discovery was unjustly limited by such a sentence; perhaps no chemist would have refused to join in the prediction. Yet even those who heard it uttered have lived to see the prediction falsified. They have seen the barrier of distance vanish before the chemist, as it has long since vanished before the astronomer. They have seen the chemist, like the astronomer, penetrate the vast abyss of space and bring back tidings from the worlds beyond. Comte might well think it impossible. We know it to be true.

We have learned from this episode of scientific history that the attempt to draw an impassable line between the domain of the chemist and the domain of the astronomer was not justified by the result. Another generation may learn to obliterate as completely the line between the domain of the chemist and the domain of the mathematician. When that shall be, when Science shall have subjected all natural phenomena to the laws of Theoretical Mechanics, when she shall be able to predict the result of every combination as unerringly as Hamilton predicted conical refraction or Adams revealed to us the existence of Neptune—that we cannot say. That day may never come, and it is certainly far in the dim future. We may not anticipate it—we may not even call it possible. But not the less are we bound to look to that day, and to labour for it as the crowning triumph of Science, when Theoretical Mechanics shall be recognised as the key to every physical enigma—the chart for every traveller through the dark Infinite of Nature.

BIOLOGICAL SECTION.

ABSTRACT OF THE OPENING ADDRESS OF THE PRESIDENT, PROFESSOR PETER REDFERN, M.D.

REFERRING to some of the great revolutions in our knowledge of anatomy and physiology which have taken place within the recollection of those now living, the lecturer first spoke of the discovery of the cell-theory by the late Professor John Goodsir—his account of the production of ulceration by cell-growth, of the characters of the corpuscles of bone, of the structure of lymphatic glands, and of the germinal centres of basement membranes as they were then understood.

At this period the great discoveries of Schleiden and Schwann seemed likely to upset all that had previously constituted Physiology. The idea that all tissues were either composed of cells or had been formed of cells—that nucleated cells elaborated all the secretions and formed the excretions—that their energy lay at the very root of the formation, the reproduction, and the function of every tissue and organ, was a revelation of such astounding simplicity as might well upset men's minds and prevent their seeing beyond.

Cells were then understood to constitute the mass of all organs (the liver, spleen, kidney, and brain), and to be the main agents in the discharge

of their functions—to exist and grow upon the definite membranous walls of the glandular vesicles and ducts—to be fed by blood brought to the attached surface of membranes which seemed almost everywhere to form an absolute separation of the cellular part (the potential gland) from the non-essential blood- and lymph-vessels, the nerves, and framework of the organ.

This great cell-theory has now given place to what I think is certain knowledge, that living matter may move, perform all the functions of assimilation and nutrition, and reproduce its like without having any of the essential characters of a cell. A living mass of protoplasm may change its shape, alter its position, feed and nourish itself, and form other matter having the same properties as it has, and yet be perfectly devoid of any structure recognisable by the highest powers of the microscope.

Mr. Lister showed that the contraction of pigment-cells in the skin changes the position of the pigment-granules, driving them alternately into the processes and the body of the cell. Kühne, Golubew, and Stricker observed changes of form in amoebae (white blood-corpuscles and embryonal capillaries, respectively) after the application of electrical stimuli; and Brücke observed contraction in the pigment-cells of the skin of the chameleon after excitation of the sensory nerves; whilst Kühne noticed contraction in corneal cells after excitation of the corneal nerves.

Thus obvious movements in fixed cells or masses of protoplasm are proved to result from the operation of various stimuli, including nervous stimuli.

But all cells are not fixed. The blood-cells, fixed, as cells of organs, at an early period, become free in the blood-fluid and are moved along by the forces which circulate it until a second time they enter into the composition of the solid tissues by penetrating the walls of the blood-vessels and moving along the substance of the tissues for purposes which are not yet wholly explicable.

Our knowledge of this circulating fluid has marvellously increased. The duration of the life of any of its particles is but short; they die and their places are occupied by others, as was the case with our forefathers, and will be the case with ourselves. It is now a matter of observation, which commenced with Hirt of Zittau, that after every meal an amazing number of white corpuscles are added to the blood: breakfast doubles their proportion to the coloured corpuscles in half an hour; supper increases their proportion three times; and dinner makes it four times as great. They come from such solid glands as the spleen. In the blood going to the spleen, their proportion is one to two thousand two hundred and sixty; in that returning from the spleen it is one to sixty. Every organ and every tissue changes this fluid; and, to my mind, perhaps the most stupendous miracle of organisation is the steady maintenance of but slightly variable characters in the living and moving blood which is every moment undergoing changes of different kinds as it circulates through each tissue and organ in the body.

Yet with all this change there is an invariable transmission of the parental characters by continual descent from particle to particle as each takes the place of a former one; and thus each organ continues to discharge the same function from year to year. Animals of the same kind retain the old number of organs, the same shape of body, and similar modes of life. There is no sign of commencing life, no coining of new vital power, no production of living out of dead matter. The original life extends its limits; it operates in a more extended sphere; but it is the same life, it operates in the same way, it never fails to be recognisable in the individual by the same characters as it had when it was first known. Whatever other functions it discharges, it acts continually in obedience to the first great law; it increases and multiplies and replenishes the earth.

The lecturer then referred to the recent increase in our knowledge of animal membranes, and especially of basement membranes, through the researches of Dr. John Reid, Sir James Paget, and others, assisted by Professor Graham's distinction of substances into the two classes of colloids and crystalloids; to Pflüger's researches on the variable characters of the alveoli, the secreting cells, and the excretory ducts of the salivary glands; Bowman's on the anatomy of the organs of sense; and others; and concluded with a reference to the amount of certainty which physical science has imparted to physiology by furnishing the means of examining and accurately measuring the rates of transmission of nerve-currents, of obtaining tracings of the respiratory movements and of the arterial pulsations, and of examining the retina in the living eye and the larynx of a living man almost as readily as if these parts were exposed in a dissection.

GEOGRAPHICAL SECTION.

ABSTRACT OF THE OPENING ADDRESS OF THE PRESIDENT, MAJOR WILSON, R.E.

MAJOR WILSON'S address, in the Geographical Section, was one of considerable importance. After pointing out in his opening remarks the necessity for a study of physical geography to all who may ever be involved in campaigns, the gallant officer observed:—

To show how varied are the conditions under which war has to be carried on, and how much its successful issue may depend on a previous careful study of the physical character of the country in which it is waged, it is only necessary to remind you of the recent operations on the Gold Coast, brought to a successful issue in an unhealthy climate, and in the heart of a dense tropical forest, where an impenetrable undergrowth, pestilential swamps, and deep rivers obstructed the march of the troops; of the Abyssinian expedition, landing on the heated shores of the Red Sea, and thence, after climbing to the lofty frozen highlands of Abyssinia, working its way over stupendous ravines to the all but inaccessible rock, crowned by the fortress of Magdala; of the march of the Russian columns across the steppes and deserts of Central Asia to the Khivan oasis, one month wearily plodding through deep snow, the next sinking down in the burning sand, and saved from the most terrible of disasters by the timely discovery of a well; and, lastly, of the great struggle nearer home, the last echoes of which have hardly yet passed away, when the wave of German conquest, rolling over the Vosges and the Moselle, swept over the fairest provinces of France. The influence of the earth's crust on war may be regarded as twofold: first, that which it exerts on the general conduct of a campaign; and, second, that which it exerts on the disposition and movement of troops on the field of battle. Military geography treats of the one, military topography of the other. The climate of the theatre of war must always have an important influence on military operations, and should be the subject of careful study. Our own experience in the Crimea shows how much suffering may be caused by want of forethought in this respect. General Verevkin's remarkable march of more than a thousand miles, from Orenburg to Khiva, with the thermometer ranging from 24° below zero to 100°, without the loss of a man, shows what may be accomplished with due preparation. Nor should the geological structure of a country be overlooked, in its influence on the varied forms which the earth's crust assumes—on the presence or otherwise of water, on the supply of metal for repairing roads, and, if we may trust somewhat similar appearances on the Gold Coast, at Hong Kong, and in the Seychelles, on the healthiness or unhealthiness of the climate. But though mountain ranges and rivers materially affect the operations of war, they are by no means insurmountable obstacles. The Alps have been repeatedly crossed since the days of

Hannibal; Wellington crossed the Pyrenees in spite of the opposition of Soult; Diebitsch the Balkan, though defended by the Turks; and Pollock forced his way through the dreaded Khaibar; whilst there is hardly a river in the length and breadth of Europe that has not been crossed, even when the passage has been ably disputed.

Queen Elizabeth's Minister was right when he said that "knowledge is power;" and a knowledge of the physical features of a country, combined with a just appreciation of their influence on military operations is a very great power in war. It was this class of knowledge, possessed in the highest degree by all great commanders, that enabled Jomini to foretell the collision of the French and Prussian armies at Jena in 1807, and in later years enabled a Prussian officer, when told that MacMahon had marched northwards from Chalons, to point unerringly to Sedan as the place where the decisive battle would be fought. As, then, all military operations must be based on a knowledge of the country in which they are to be carried on, it should never be forgotten that every country contiguous to our own—and the ocean brings us into contact with almost every country in the world—may be a possible theatre of war, and that it is equally the duty and policy of a good Government to obtain all possible information respecting it. Is it with much satisfaction that we can turn to the efforts made by this country to acquire that geographical knowledge which may be of so much importance in time of need? Though we had for years military establishments on the Gold Coast, and though we had, more than once, been engaged in hostilities with the Ashantees, and might reasonably have expected to be so again, no attempt appears to have been made to obtain information about the country north of the Prah, or even of the so-called protected territories. The result was that when the recent expedition was organised, the Government had to depend chiefly on the works of Bowdich, Dupuis, and Hutton, written some fifty years ago, and on a rough itinerary of the route afterwards followed by the troops. What advantage has been taken of the presence of the officers who have been in Persia during the last ten years to increase our knowledge of that country—knowledge which would be very useful at present in the unsettled state of the boundary questions on the northern and north-eastern frontiers? How little has been added to our knowledge of Afghanistan since the war in 1842? and what part did India take in Trans-Himalayan exploration before Messrs. Shaw and Hayward led the way to Yarkand and Kashgar? It was with feelings of no slight satisfaction that many of us heard last year that the policy of isolation and seclusion which India appears to have adopted as the last soldier of Pollock's relieving force recrossed the Indus was at last to be broken, and that an expedition well found in every respect was to be sent to Kashgar. It seemed an awakening from the long slumber of the last thirty years, during which we were content to stay at home in inglorious ease, resting under the shadow of the great mountain ranges of Northern India, whilst we sent out mirzas and pundits to gather the rich store of laurels that hung almost within our grasp. Far be it from me to depreciate the valuable services of those gentlemen—services frequently performed at great personal risk and discomfort; but who can compare the results they obtained with those that would have been brought back by English officers, or by travellers, such as Mr. Shaw, Mr. Ney Elias, and others? Let us, then, hope that the Kashgar mission may date the commencement of a new era, during which geographical enterprise may be encouraged, or at any rate not discouraged, amongst the officers of the army; and that if few will now deny that a knowledge of Ashantee, of Yemen, of the northern and north-eastern frontiers of Persia, of Merv, And-kin, Maimana, Badakshan, and Wakhan, would

have been of importance in the years just passed, it may not be forgotten that a knowledge of these countries may be of still more importance in a not far-distant future. May we not take a hint in this respect from our now-near neighbours in Central Asia, the Russians? No one who has followed their movements can fail to have been struck by the intense activity of their topographical staff, an activity that can only be compared to that of England at the period when Burnes, Eldred Pottinger, Wood, Abbott, Connolly, and others whose names are ever fresh in our memories, were penetrating into the wildest recesses of Central Asia. The Russians are indeed far in advance of us in all that relates to those survey operations, and that geographical exploration which should always be carried on simultaneously with the advance of an expeditionary force into an unknown or but partially-known country; they have long since realised the necessity of accurate geographical knowledge, based on sound systematic survey, and, having learned in time the lesson that opportunities once lost may never be recovered, make every effort to take advantage of those that are offered to them. In the expedition against Khiva, each column had attached to it an astronomer and small topographical staff, whose duty it was to fix the positions of all camps and map the route and adjacent country, whilst officers on detached duty were instructed to keep itineraries of their routes which might be fitted in to the more accurate survey. On the fall of Khiva, an examination of the Khanate was at once commenced, and it was even thought necessary to send Colonel Skobelof, disguised as a Turkoman, to survey the route by which Colonel Markosof should have reached the oasis. It is much to be regretted that some such system was not adopted during the recent operations on the Gold Coast, and that so little, comparatively speaking, has been added to our knowledge of Ashanti and the protectorate. The conclusion of peace with King Coffee, and the effect that must have been produced on the inland tribes by the destruction of Cumassi, appear to offer facilities for the examination of a new and interesting region which, it is to be hoped, will not be neglected by those who are able and willing to take part in the arduous task of African exploration.

In every country in Europe, except Spain, Turkey, and Greece, great topographical surveys are either completed or in progress. Frederick the Great was, I believe, the first to recognise that in planning or conducting operations on a large scale, as well as directing many movements on the field of battle, a commander should have before him a detailed delineation of the ground. To supply this want, Frederick originated military topography, which, in its narrower sense, may be defined as the art of representing ground on a large scale in aid of military operations. It was found, however, that during war there was rarely sufficient time to construct maps giving the requisite information, and thus the necessity arose of collecting in peace the requisite data. In this necessity may be seen the origin of all national topographical surveys, including our own, which was commenced as a purely military survey in 1784 by General Roy, and transferred in 1791 to the old Board of Ordnance. Side by side with the large establishments engaged in the production of the topographical maps, there have grown up in most countries extensive departments, sometimes employing from fifty to sixty officers, whose duty it is to supplement the maps of their own and foreign countries by the collection of all information, of whatever nature, that may be useful in time of war. The brief interval that elapses between the declaration of war and the commencement of hostilities, the rapid movements of armies, and the short duration of campaigns at the present, have shown more clearly than ever the imperative necessity of previous preparation for war.

The progress of the European surveys, and especially of our own, has been marked by many

results which have indirectly influenced the advancement of geographical science. Such are the improvements in instruments made during the progress of the triangulation, the introduction of the Drummond light, Colby's compensating bars, &c.; the connexion of the English and Continental systems of triangulation; the pendulum observations at various places; the measurement of arcs of the meridian; the comparison of the standards of length of foreign countries, of India, Australia, and the Cape of Good Hope, with our standard yard, which has recently been completed at the Ordnance Survey Office, Southampton. In the same category may be placed the improvements in the art of map engraving, in the application of chromo-lithography to the production of maps; and the employment of electrotyping to obtain duplicates of the original plates. The method of copying maps by photography without any error in scale, or any distortion that can be detected by the most rigid examination, was first proved to be practicable, and was adopted in the Ordnance Survey Department in 1854, by Major-General Sir Henry James, for the purpose of facilitating the publication of the Government maps of the United Kingdom on the various scales. Since that the development of the various photographic processes has been brought to a high state of perfection. During the last five years photographic negatives on glass covering an area of 10,071 square feet were produced at the Ordnance Survey Office for map-making purposes alone, and from these negatives 21,760 square feet of silver prints were prepared. An area of 959 square feet of the negatives was also used in producing 13,595 maps on various scales by the photo-zincographic process, which was also introduced by Major-General Sir Henry James. It was by similar processes that the Germans were enabled to provide the enormous number of copies of the various sheets of the map of France required during the war of 1870-1. Our great national survey is the most mathematically accurate in Europe, and it speaks much for the ability of the officers who have brought it to its present state of perfection, that from the very first they recognised the necessity of extreme scientific accuracy in their work.

Turning to the appliances for geographical instruction, I cannot but think that the use of models as a means of conveying geographical instruction has been too much neglected in our schools. If any one considers the difficulty a pupil has in understanding the drawing of a steam engine, and the ease with which he grasps the meaning of the working model, and how from studying the model and comparing it with the drawing he gradually learns to comprehend the latter; he will see that a model of ground may be used in a similar manner to teach the reading of a map of the same area. Relief maps of large areas on a small scale have their uses, but they are unsuitable for educational purposes on account of the manner in which heights must be exaggerated; this objection, however, does not apply to models of limited areas on a sufficient scale, which always give a truthful and effective representation of the ground. One reason why models have not been more used has been their cost, but the means of constructing them with ease, rapidity, and at slight expense are quickly accumulating as the six-inch contoured sheets of the Ordnance Survey are published. Instruction in geography should begin at home, and I would suggest that as the six-inch survey progresses, each decent school throughout the country should be provided with a model and map of the district in which it is situated. If this were done, the pupils would soon learn to read the model, and having once succeeded in doing this, it would not be long before they were able to understand the conventional manner in which topographical features are represented on a plane surface, and acquire the power of reading not only the map of their own neighbourhood, but any map which was placed before them. In our wall maps

I think we have been too much inclined to pay attention to the boundaries of countries, and to neglect the general features of the ground. I fear instruction in physical geography too often comes after that in political geography, instead of a knowledge of the latter being based on a knowledge of the physical features of the earth. My meaning may perhaps be explained by reference to the well-known wall map of Palestine, which frequently disfigures rather than ornaments the walls of our school-rooms. In this map there are usually deep shades of red, yellow, and green, to distinguish the districts of Judea, Samaria, and Galilee, and perhaps another colour for the Trans-Jordanic region, with a number of Bible names inserted on the surface, whilst the natural features are quite subordinate, and sometimes not even indicated. There is perhaps no book that bears the impress of the country in which it was written so strongly as the Bible; but it is quite impossible for a teacher to enable his pupils to realise what that country is with the maps at present at his disposal. The first object of a wall-map should be to show the geographical features of countries, not their boundaries, and for this purpose details should be omitted, and the grander features have special attention paid to them. In school atlases the same fault may be traced, physical features being too often made subordinate to political divisions; and there is also in many cases a tendency to overcrowd the maps with a multitude of names which only serve to confuse the pupil and divert his attention from the main points. The use of globes in our schools should be encouraged as much as possible, as there are many physical phenomena which cannot well be explained without them, and they offer far better means of conveying a knowledge of the relative positions and real sizes of the various countries, seas, &c., than any maps. The great expense of globes has hitherto prevented their very general use, but some experiments are at present being made with a view to lessening the cost of their construction, which it is hoped may be successful. I cannot pass from this subject without alluding to that class of maps which gives life to the large volumes of statistics which are accumulating with such rapidity. On the continent these maps are employed to an extent unknown in this country, both for purposes of reference and education, and they convey their information in a simple and effective manner.

The gallant President then briefly passed in review the principal geographical events and doings of the day. He alluded to the importance of Lieutenant Cameron's work on Lake Tanganyika and of its probable results, and noticed the departure of two Engineer officers, Lieutenants Watson and Chippendale, to survey Colonel Gordon's province in Central Africa. The survey of Palestine had led to the formation of an American society for the exploration of the country east of Jordan, and a German society for the exploration of Phoenicia. The American society was prospering, but our own was unfortunately languishing for want of funds. After touching on the work of Colonel Baker and Lieutenant Gill on the northern frontier of Persia, of the Kashgar mission in their route across the Pamir, and of Colonel Warburton's important journey across Australia, Major Wilson said he could not help thinking that the expeditions sent out by Yale College, U.S., to explore the Yellowstone country, Arizona, Oregon, and the Aleutian Islands might well serve as an example to the older institutions of Oxford, Cambridge, and Dublin. Captain Anderson, R.E., had been engaged in running the demarcation line along the forty-ninth parallel of latitude between the Missouri and Saskatchewan rivers. In the south, Commanders Lull and Selfridge had found practicable routes for ship canals from Greytown by Lake Nicaragua to Brito on the Pacific, and by way of the Atrato from the Gulf of Darien to a point near Cupica on the Pacific, the cost of the

latter being estimated at twelve million pounds. In South America Professor Orton had been extending our knowledge of the Amazon country, and the Peruvian Government was actively promoting the exploration of the little known parts of Peru. In conclusion, Major Wilson expressed his regret at not being able to give any positive assurance of the prospect of a Government Arctic expedition, but there was an idea that the Prime Minister was not unfavourable to the project. The exploration of the still undiscovered region was trivial compared to what had been done. He for his part would emphatically exclaim, "It is to be done, and England ought to do it!"

Thursday.—SECTION D.

Dr. Huggins gave an account of some experiments he had made on Coggia's comet, which was so striking an object in the northern sky a few weeks ago, with the spectroscope. Before the spectroscope was applied to comets, the polariscope had shown that a part only of their light was polarised, or reflected solar light. It was uncertain what the other part consisted of. The question, therefore, which the spectroscope had to determine was whether the light of comets was emitted by matter of which they consisted; what were the conditions under which this light was emitted, and what was the chemical nature of the matter which emitted the light. The result of this examination was to show that certainly a large part of the light of comets was not merely reflected solar light. In some small telescopic comets which he observed in 1866-8 he found by the application of the spectroscope that part of their light consisted of three bright bands which were apparently identical with the bright bands characteristic of carbon, either alone or in combination. Coggia's comet was the first bright one, however, to which the spectroscope had been applied. When the slit of the spectroscope was placed on the diameter of the head of the comet, the nucleus gave a continuous spectrum, and the other parts of the comet gave a spectrum of three bright bands similar to those seen in former comets; the relative proportion of the three bright bands and the continuous spectrum in which they fell varied in different parts of the comet. When the slit was placed across the bands were bright; when the slit was brought back behind the nucleus at the beginning of the tail, the bands became so faint that only one could be traced upon the continued spectrum. On comparing the bright bands with those of carbon, they were found to have a general correspondence. The bands of the comet were so far shifted, however, as to indicate—supposing there really was carbon in the comet—that the relative motion of the approach of the comet to the earth was forty-six miles per second. The comet really, however, approached the earth at the rate of twenty-four miles per second; and it was, therefore, uncertain whether the whole or part of the difference in this velocity was due to the motion of matter within the comet. The brighter portion of the head of the comet was due evidently to a larger proportion of the matter giving a continuous spectrum. It seemed probable, therefore, that the nucleus was of solid matter, heated by the sun and throwing out matter which formed the coma and tail; and part of this was in a gaseous form, giving the spectra of bright lines. The other portion existed probably in small incandescent particles; the polariscope showing that certainly not more than one-fifth of the whole light was reflected solar light.

Friday.—SECTION A.

Dr. Andrews read a paper on "Experiments at High Pressures." He began by giving a description of the method which he employed in his experiments on the continuity of the liquid and gaseous states of matter, to obtain in closed

vessels connected with fine capillary glass tubes pressures reaching to 100 and even 300 atmospheres. This is effected by a conical connection between the glass and metal, and by introducing a well-packed steel rod into the interior of the apparatus, which is filled either with water or mercury. The compressibility of liquid sulphurous acid was stated (unlike that of water) to diminish as the pressure increases. But the most elaborate experiments referred to were made on a mixture of three volumes of carbonic acid with four volumes of nitrogen, and graphic curves were shown exhibiting the result of compressing this mixture to 300 atmospheres of pressure at various temperatures from 2° to 48° C. The very important result was announced that even at 2° the carbonic acid in such a mixture could not be liquefied under any pressure. In short, the critical point (a term introduced into this branch of science by Dr. Andrews) of carbonic acid becomes lowered many degrees when that gas is mixed with a non-liquefiable gas such as nitrogen.

SECTION C.

Mr. W. Pengelly, F.R.S., read the tenth report of the committee for exploring Kent's Cavern, Torquay. The investigation has been pursued without interruption during the entire period which has elapsed since the meeting at Bradford, in 1873. The mode of operation had been described in previous reports. The interest felt in the explorations by the inhabitants and visitors to Torquay has suffered no abatement. The branches of the cavern in which the researches have been carried on since the ninth report was presented in 1873, are those known as the long arcade, Underhay's gallery, the cave of inscriptions, and Clinick's gallery. The exploration of the former two has been completed, but the work is still in progress in the latter. Letters of all sizes, from some fully three inches in height to others as small as ordinary writing, cross each other, and thus add to the difficulty of decipherment. Some of them were cut out with great care and finish, and must have occupied a large amount of time, while others were but hasty scratches. It seemed to have been somewhat fashionable to surround the inscriptions with rectangular parallelograms, varying from 6.5 to 3.75 inches in length, by 5.5 to 3.5 in breadth; at least four of them belong to the seventeenth century, and the earliest of the series, so far as at present known, is that of "Peter Lemaire Richcolby, of London, 1615." Underhay's gallery was found, when the work of exploration was completed, to be about 20 feet long, from 2.5 to 7 feet wide, and from 6 to 7.5 feet in height. The late Mr. Underhay found on striking into the stalagmite a few small bones, which he succeeded in bringing out, and which were found to be phalanges of human feet. Though the specimens did not appear to be of an antiquity at all approaching that of the cave hyena and his contemporaries, the superintendents, who were familiar with them, very carefully watched the progress of the work in the hope of finding some further traces of skeletons; and on reaching Mr. Underhay's very limited diggings they met with a series of bones, all on and in the stalagmite, some of which were certainly human, whilst others were as clearly not so. Amongst the flint implements found in Brixham cavern that known as the 6-8 has attracted considerable attention. First, Very near the spot occupied by the specimen there rises a vast cone of stalagmite with an inscription on its surface, which shows that it has undergone no appreciable augmentation of volume during the last two and a-half centuries. Second, Prior to that was the period spent in rearing the greater portion of this cone, which measures upwards of 40 feet in basal girth, reaches a height of fully 13 feet, and contains more than 600 cubic feet of stalagmite matter. Third, Still earlier was the era during which the cavern floor was introduced, in a series of successive small instalments with protracted periods of intermittence, when the

cavern was alternately the home of man and of the cave hyena, and the latter dragged thither piecemeal so many portions of extinct mammals as to convert the cave into a crowded palaeontological museum. Fourth, Further back still was the period during which the base or nucleus of the cone or boss was laid down in the form of crystalline stalagmite. Fifth, and earliest of all, was the time when materials not derivable from the immediate district were carried into the cavern through openings now probably choked, entirely unknown, and the direction in which they lie but roughly guessed at, when apparently the cavern-haunting hyena had not yet arrived in Britain. At an early stage in this earliest era man occupied Devonshire, for prior to the introduction of the uppermost four feet of breccia, one of his massive unpolished tools, rudely chipped out of a nodule of chert, found its way into a recess in the cavern, and had a character such as to show that it must have been undisturbed in the same spot until it was detected by a committee of the British Association.

Mr. R. H. Tiddeman read the report of the committee for assisting in the exploration of the Settle Victoria Caves. The author had received an important communication from Professor Busk, to the effect that a certain bone from the Victoria Cave which had been in his possession some time, and had been doubtfully referred to elephant, was undoubtedly human. The bone was exhumed in 1872. There were also two small molars of *Elephas*. Dr. Leith Adams, after a careful examination and comparison with type specimens in the British Museum, pronounced them to be *E. antiquus*, an opinion in which Mr. Davis concurs. On December 19 Mr. Busk read a paper on the human remains to the Anthropological Institute. He states that there is nothing in the condition of the bone opposed to its belonging to the most remote antiquity, nor to its owner having been coeval with the extinct mammalia mentioned above, with whose remains the specimen differs in no appreciable degree as to condition. Its interest, therefore, as representing one of the earliest extinct specimens of humanity, will be at once obvious. The author then recapitulated the order and succession of the beds inside and outside the cave, and their relation the one to the other, and then exhibited bones and objects of interest which had been found.

SECTION D—(SUBSECTION OF BOTANY AND ZOOLOGY).

Dr. Carpenter read a paper entitled "Further Researches on *Eozoon canadense*." He contended that the hypothesis of the foraminiferal origin of *Eozoon canadense* entirely accorded with the features alike of the general and of the minute structure of the best preserved specimens of this body, and that it is the only hypothesis which fits all the facts of the case; whilst the hypothesis of subsequent metamorphic change, which has every probability to recommend it, fully accounts for all the appearances on which the anti-Eozoonists rely as evidence of its mineral origin, which in the face of the new evidence he adduced, was to his mind utterly "unthinkable." Until these facts shall have been disproved by the examination of the specimens which he was ready to submit to any or all of his opponents, he must claim to withdraw from a controversy which cannot be carried further to any advantage without a "comparison of actual specimens." Whilst he admitted to the full every evidence of mineralisation adduced by Professors King and Rowney (of Galway), they did not admit the evidence of organic structure which they had not seen, but which he had expressed his willingness to place before them, with the parallelisms presented by recent foraminifera. He was endeavouring to engage his Canadian associates in the preparation of a joint monograph on *Eozoon canadense*, to be offered to the Palaeontographical Society, with a request that before determining either to accept or to decline it, the Council would

appoint a committee of "experts," qualified by their knowledge of micro-paleontology and micro-mineralogy to judge whether what they held to be organic structure could possibly be regarded as the product of any kind of physical or chemical action.

SUBSECTION OF ANATOMY AND PHYSIOLOGY.

Professor Redfern read a paper on the influence of food, and the methods of supplying it to plants and animals. Plants, he said, entirely uninfluenced by any but physical conditions, had long since taught farmers, and gardeners especially, that they must not only have abundance of food, but that they must have it in a condition in which they can readily make use of it. In proof of this, he need only refer to the known necessity for the regular use of highly nutritious liquid manure in the cultivation of perfect roses, and to the care the agriculturist had learned to take in the application of the proper kind of artificially-prepared manure for each crop, and in its use in a form in which the plant could most easily absorb and apply it. It was many years since that Mr. Ward gave a beautiful illustration of the influence of food on plants. He found a perfect specimen of the common centaury half an inch high, with one or two pairs of most minute leaves and one flower, on the bare chalk at the border of a wood; on tracing it into the open parts of the wood, it became a glorious plant, 4 or 5 feet high, and covered with hundreds of flowers. He wished to show that it was not only important to supply plants with food, but to do this so that they could easily appropriate it, otherwise the supply would be lost and wasted. He had brought with him a series of specimens of common rape which would speak for themselves. The largest specimen measured 5 feet 6 inches high; they branched freely from the ground upwards at intervals of a few inches: their large leaves, thick and fleshy, measured 14 inches by 6 inches, and their flowers once covered the plants with their brilliant yellow colour. The middle-sized specimens measured 5 feet 2 inches high, but for 3 feet from the ground they had no branch at all; their leaves were very small, and the plants were little more than a fibrous stem, with a few flowers at the top. The smallest specimens were only three feet high, having a few leaves not an inch long by 3-16ths of an inch broad, and a few flowers at the top entirely useless for any purpose whatever. Other specimens of an essentially similar kind were grown on another spot of ground, under circumstances essentially similar. Of these specimens a large number only measured 15 inches high; they were furnished with a few almost linear leaflets and a few flowers at the top. Yet the larger specimens grown on this ground were 5 or 6 feet high, covered with large spreading branches, furnished with abundance of leaves, yielding a very large amount of good fodder compared with the amount of surface covered by them. With regard to the roots, those of all the poorer plants were straight, small, and but little branched; while those of the well-developed plants were thick, branched, and extended on one side only. For from 4 to 6 feet distant from the edge of the plot of rape on each side the ground had been trenched two spades deep for planting with trees and shrubs, and a quantity of bog earth with sand and manure had been mixed with it, the manure having been put at the bottom of the trench, and the mixed bog earth and sand half way down. The only well-developed plants grew near the edge of this trenched ground, and their one-sided roots spread into it for two feet, exactly in the position occupied by the mixed bog earth and sand. There were only occasional smaller plants at this part, and the roots of every one of these were straight, short, and but little branched. They, in short, had not discovered that there was soft and spongy ground within so short a distance, ground in which their roots might have revelled in growth like those of their neighbour giants, if they had been equally fortunate in finding their way thither. None of the

thick long roots on the trenched side of the plants penetrated deeply into the trenched ground. It was the loose and spongy condition of the soil that had attracted them, and not the manure, for not one root had attempted to penetrate to the depth of the manure—all had been content with the position of the mixed bog and earth and sand, thus affording an absolute demonstration of the necessity of attending to the mechanical conditions of the soil, as well as to its containing a sufficiency of the materials which plants needed for food. His plants of rape had abundant nourishment in their immediate vicinity, but they could not avail themselves of it, the soft spongioles of their roots being unable to penetrate the tough clay which a great amount of labour had failed to render porous enough for roots of any kind to enter to any considerable extent. Such was exactly the condition in which many persons were who had never applied their intelligence to the selection of their food or to the methods of taking it. There were few social problems more important than how to acquaint the wife of the labourer and artisan, or even the wives and servants of the middle classes, how to expend a fair share of their income upon food to the greatest advantage, and how to prepare it without destroying its nutritive properties. A savoury dish of meat was often prepared by mincing or cutting the meat into small and more or less cubical blocks. It was then stewed or more frequently boiled; the outer surface of each little block had its albumen firmly coagulated, and the whole was converted into about as indigestible a mass as could well be imagined, the high priced and highly nutritious meat having been destroyed for the purposes of nutrition, and the action of the digestive organs probably injured for some time to come. Or good and valuable flesh meat was subjected to the process of salting, which first of all abstracted the juices of meat, and then hardened the fibres, so as to destroy or greatly deteriorate its digestibility. No doubt it was convenient to have a hardened dry mass of meat, incapable of much change for months, and ready to be used for the purpose of filling the stomach and effectually satisfying the appetite; but these were not the purposes for which food was intended to be used. It ought to be capable of supplying the waste of the body, and of being easily converted into heat and motion. If it failed in these particulars it would also fail in nourishing the brain, and aiding in the evolution of intelligence, and thus intellectual and bodily power was lost to the community, and deterioration of race was promoted. His colleague, Dr. Gordon, said that he recollected running races, putting the stone, wrestling, and other athletic exercises being the favourite amusements of the sons and servants of the farmers in the County Down. Now nothing of the sort was heard of. These young men found a short day's work almost too much for them, and at the end of it they were to be seen lying about indulging in idle conversation. Coincidentally with this they imagined themselves the equals of their masters and mistresses, and that the healthful oatmeal porridge and buttermilk twice daily, with beans and bacon for dinner, was too strong and coarse; they insisted on more delicate fare, and demanded a supply of tea and white bread. They were unconscious that persons in their position but a few years ago possessed amazing vigour, and performed twice the amount of labour with greater ease, and when the day's work was over actually revelled in the display of surplus strength, which nothing but their better and more rational diet could have yielded them.

ADDRESS TO THE DEPARTMENT OF ZOOLOGY AND BOTANY, BY DR. HOOKER, C.B., D.C.L., PRES. ROYAL SOCIETY.

I HAVE chosen for the subject of my Address to you from the chair in which the Council of the British Association has done me the honour of

placing me, the carnivorous habits of some of our brother-organisms—Plants.

Various observers have described with more or less accuracy the habits of such vegetable sportsmen as the Sundew, the Venus fly-trap, and the Pitcher-plants, but few have enquired into their motives; and the views of those who have most accurately appreciated these have not met with that general acceptance which they deserved.

Quite recently the subject has acquired a new interest, from the researches of Mr. Darwin into the phenomena which accompany the placing albuminous substances on the leaves of *Drosera* and *Pinguicula*, and which, in the opinion of a very eminent physiologist, prove, in the case of *Dionaea*, that this plant digests exactly the same substances, and in exactly the same way that the human stomach does. With these researches Mr. Darwin is still actively engaged, and it has been with the view of rendering him such aid as my position and opportunities at Kew afforded me, that I have, under his instructions, examined some other carnivorous plants.

In the course of my enquiries I have been led to look into the early history of the whole subject, which I find to be so little known and so interesting that I have thought that a sketch of it, up to the date of Mr. Darwin's investigations, might prove acceptable to the members of this Association. In drawing it up, I have been obliged to limit myself to the most important plants; and with regard to such of these as Mr. Darwin has studied, I leave it to him to announce the discoveries which, with his usual frankness, he has communicated to me and to other friends; whilst with regard to those which I have myself studied, *Sarracenia* and *Nepenthes*, I shall briefly detail such of my observations and experiments as seem to be the most suggestive.

Dionaea.—About 1768, Ellis, a well-known English naturalist, sent to Linnaeus a drawing of a plant, to which he gave the poetical name of *Dionaea*. "In the year 1765," he writes, "our late worthy friend, Mr. Peter Collinson, sent me a dried specimen of this curious plant, which he had received from Mr. John Bartram, of Philadelphia, botanist to the late King." Ellis flowered the plant in his chambers, having obtained living specimens from America. I will read the account which he gave of it to Linnaeus, and which moved the great naturalist to declare that, though he had seen and examined no small number of plants, he had never met with so wonderful a phenomenon:—

"The plant, Linnaeus says, shows that Nature may have some views towards its nourishment, in forming the upper joint of its leaf like a machine to catch food; upon the middle of this lies the bait for the unhappy insect that becomes its prey. Many minute red glands that cover its surface, and which perhaps discharge sweet liquor, tempt the poor animal to taste them; and the instant these tender parts are irritated by its feet, the two lobes rise up, grasp it fast, lock the rows of spines together, and squeeze it to death. And further, lest the strong efforts for life in the creature just taken should serve to disengage it, three small erect spines are fixed near the middle of each lobe, among the glands, that effectually put an end to all its struggles. Nor do the lobes ever open again while the dead animal continues there. But it is nevertheless certain, that the plant cannot distinguish an animal from a vegetable or mineral substance; for if we introduce a straw or pin between the lobes, it will grasp it full as fast as if it was an insect."

This account, which in its way is scarcely less horrible than the descriptions of those mediaeval statues which opened to embrace and stab their victims, is substantially correct, but erroneous in some particulars. I prefer to trace out our knowledge of the facts in historical order, because it is extremely important to realise in so doing how much our appreciation of tolerably simple matters

may be influenced by the prepossessions that occupy our mind.

We have a striking illustration of this in the statement published by Linnaeus a few years afterwards. All the facts which I have detailed to you were in his possession; yet he was evidently unable to bring himself to believe that Nature intended the plant—to use Ellis's words—"to receive some nourishment from the animals it seizes;" and he accordingly declared, that as soon as the insects ceased to struggle, the leaf opened and let them go. He only saw in these wonderful actions an extreme case of sensitiveness in the leaves, which caused them to fold up when irritated, just as the sensitive plant does; and he consequently regarded the capture of the disturbing insect as something merely accidental, and of no importance to the plant. He was, however, too sagacious to accept Ellis's sensational account of the *coup de grâce* which the insects received from the three stiff hairs in the centre of each lobe of the leaf.

Linnaeus' authority overbore criticism, if any were offered; and his statements about the behaviour of the leaves were faithfully copied from book to book.

Broussonet (in 1784) attempted to explain the contraction of the leaves by supposing that the captured insect pricked them, and so let out the fluid which previously kept them turgid and expanded. Dr. Darwin (1761) was contented to suppose that the *Dionaea* surrounded itself with insect traps to prevent depredations upon its flowers.

Sixty years after Linnaeus wrote, however, an able botanist, the Rev. Dr. Curtis (dead but a few years since), resided at Wilmington, in North Carolina, the head-quarters of this very local plant. In 1834 he published an account of it in the *Boston Journal of Natural History*, which is a model of accurate scientific observation. This is what he said:—"Each half of the leaf is a little concave on the inner side, where are placed three delicate hair-like organs, in such an order, that an insect can hardly traverse it without interfering with one of them, when the two sides suddenly collapse and enclose the prey, with a force surpassing an insect's efforts to escape. The fringe of hairs on the opposite sides of a leaf interlace, like the fingers of two hands clasped together. The sensitiveness resides only in these hair-like processes on the inside, as the leaf may be touched or pressed in any other part without sensible effects. The little prisoner is not crushed and suddenly destroyed, as is sometimes supposed, for I have often liberated captive flies and spiders, which sped away as fast as fear or joy could carry them. At other times I have found them enveloped in a fluid of a mucilaginous consistence, which seems to act as a solvent, the insects being more or less consumed in it."

To Ellis belongs the credit of divining the purpose of the capture of insects by the *Dionaea*. But Curtis made out the details of the mechanism, by ascertaining the seat of the sensitiveness in the leaves; and he also pointed out that the secretion was not a lure exuded before the capture, but a true digestive fluid poured out, like our own gastric juice after the ingestion of food.

For another generation the history of this wonderful plant stood still; but in 1868 an American botanist, Mr. Canby, who is happily still engaged in botanical research, while staying in the *Dionaea* district, studied the habits of the plant pretty carefully, especially the points which Dr. Curtis had made out. His first idea was that "the leaf had the power of dissolving animal matter, which was then allowed to flow along the somewhat trough-like petiole to the root, thus furnishing the plant with highly nitrogenous food." By feeding the leaves with small pieces of beef, he found, however, that these were completely dissolved and absorbed; the leaf opening again with a dry surface, and ready for another meal, though with an appetite somewhat jaded. He found that cheese disagreed horribly with the

leaves, turning them black, and finally killing them. Finally, he details the useless struggles of a *Curculio* to escape, as thoroughly establishing the fact that the fluid already mentioned is actually secreted, and is not the result of the decomposition of the substance which the leaf has seized. This *Curculio* being of a resolute nature, attempted to eat his way out—"when discovered he was still alive, and had made a small hole through the side of the leaf, but was evidently becoming very weak. On opening the leaf, the fluid was found in considerable quantity around him, and was without doubt gradually overcoming him. The leaf being allowed to close upon him, he soon died."

At the meeting of this Association last year, Dr. Burdon Sanderson made a communication, which, from its remarkable character, was well worthy of the singular history of this plant; one by no means closed yet, but in which his observations will head a most interesting chapter.

It is a generalisation—now almost a household word—that all living things have a common bond of union in a substance—always present where life manifests itself—which underlies all their details of structure. This is called *protoplasm*. One of its most distinctive properties is its aptitude to contract; and when in any given organism the particles of protoplasm are so arranged that they act as it were in concert, they produce a cumulative effect which is very manifest in its results. Such a manifestation is found in the contraction of muscle—and such a manifestation we possibly have also in the contraction of the leaf of *Dionaea*.

The contraction of muscle is well known to be accompanied by certain electrical phenomena. When we place a fragment of muscle in connexion with a delicate galvanometer, we find that between the outside surface and a cut surface there is a definite current, due to what is called the electromotive force of the muscle. Now when the muscle is made to contract this electromotive force momentarily disappears. The needle of the galvanometer, deflected before, swings back towards the point of rest; there is what is called a negative variation. All students of the vegetable side of organised nature were astonished to hear from Dr. Sanderson, that certain experiments which, at the instigation of Mr. Darwin, he had made, proved to demonstration that when a leaf of *Dionaea* contracts, the effects produced are precisely similar to those which occur when muscle contracts.

Not merely then are the phenomena of digestion in this wonderful plant like those of animals; but the phenomena of contractility agree with those of animals also.

Drosera.—Not confined to a single district in the New World, but distributed over the temperate parts of both hemispheres, in sandy and marshy places, are the curious plants called Sundews—the species of the genus *Drosera*. They are known to be near congeners of *Dionaea*, a fact which was little more than guessed at when the curious habits which I am about to describe were first discovered.

Within a year of each other two persons—one an Englishman, the other a German—observed that the curious hairs which everyone notices on the leaf of *Drosera* were sensitive.

This is the account which Mr. Gardom, a Derbyshire botanist, gives of what his friend Mr. Wateley, "an eminent London surgeon," made out in 1780:—"On inspecting some of the contracted leaves we observed a small insect or fly very closely imprisoned therein, which occasioned some astonishment as to how it happened to get into so confined a situation. Afterwards, on Mr. Wateley's centrically pressing with a pin other leaves yet in their natural and expanded form, we observed a remarkable sudden and elastic spring of the leaves, so as to become inverted upwards and, as it were, encircling the pin, which evidently showed the method by which the fly came into its embarrassing situation."

This must have been an account given from memory, and represents the movement of the hairs as much more rapid than it really is.

In July of the preceding year (though the account was not published till two years afterwards) Roth, in Germany, had remarked in *Drosera rotundifolia* and *longifolia* "that many leaves were folded together from the point towards the base, and that all the hairs were bent like a bow, but that there was no apparent change on the leafstalk." Upon opening these leaves, he says, "I found in each a dead insect; hence I imagined that this plant, which has some resemblance to the *Dionaea muscipula*, might also have a similar moving power."

"With a pair of pliers I placed an ant upon the middle of the leaf of *D. rotundifolia*, but not so as to disturb the plant. The ant endeavoured to escape, but was held fast by the clammy juice at the points of the hairs, which was drawn out by its feet into fine threads. In some minutes the short hairs on the disk of the leaf began to bend, then the long hairs, and laid themselves upon the insect. After a while the leaf began to bend, and in some hours the end of the leaf was so bent inwards as to touch the base. The ant died in fifteen minutes, which was before all the hairs had bent themselves."

These facts, established nearly a century ago by the testimony of independent observers, have up to the present time been almost ignored; and Trécul, writing in 1855, boldly asserted that the facts were not true.

More recently, however, they have been repeatedly verified: in Germany by Mitschke, in 1860; in America by a lady, Mrs. Treat, of New Jersey, in 1871; in this country by Mr. Darwin, and also by Mr. A. W. Bennett.

To Mr. Darwin, who for some years past has had the subject under investigation, we are indebted, not merely for the complete confirmation of the facts attested by the earliest observers, but also for some additions to those facts, which are extremely important. The whole investigation still awaits publication at his hands, but some of the points which were established have been announced by Professor Asa Gray in America, to whom Mr. Darwin had communicated them.

Mr. Darwin found that the hairs on the leaf of *Drosera* responded to a piece of muscle or other animal substance, while to any particle of inorganic matter they were nearly indifferent. To minute fragments of carbonate of ammonia they were more responsive.

I will now give the results of Mrs. Treat's experiments, in her own words:—

"Fifteen minutes past ten I placed bits of raw beef on some of the most vigorous leaves of *Drosera longifolia*. Ten minutes past twelve two of the leaves had folded around the beef, hiding it from sight. Half-past eleven on the same day, I placed living flies on the leaves of *D. longifolia*. At twelve o'clock and forty-eight minutes one of the leaves had folded entirely around its victim, and the other leaves had partially folded, and the flies had ceased to struggle. By half-past two four leaves had each folded around a fly. The leaf folds from the apex to the petiole, after the manner of its veneration. I tried mineral substances, bits of dry chalk, magnesia, and pebbles. In twenty-four hours neither the leaves nor the bristles had made any move in clasping these articles. I wetted a piece of chalk in water, and in less than an hour the bristles were curving about it, but soon unfolded it again, leaving the chalk free on the blade of the leaf."

Time will not allow me to enter into further details with respect to *Dionaea* and *Drosera*. The repeated testimony of various observers spreads over a century, and though at no time warmly received, must, I think, satisfy you that in this small family of the *Droseraceae* we have plants which in the first place capture animals for purposes of food; and in the second, digest and dissolve them by means of a fluid which is poured out for the purpose; and thirdly, absorb the solution of animal matter which is so produced.

Before the investigations of Mr. Darwin had

led other persons to work at the subject, the meaning of these phenomena was very little appreciated. Only a few years ago Duchartre, a French physiological botanist, after mentioning the views of Ellis and Curtis with respect to *Dionaea*, expressed his opinion that the idea that its leaves absorbed dissolved substances was too evidently in disagreement with our knowledge of the function of leaves, and the whole course of vegetable nutrition, to deserve being seriously discussed.

Perhaps if the *Droseraceae* were an isolated case of a group of plants exhibiting propensities of this kind, there might be some reason for such a criticism. But I think I shall be able to show you that this is by no means the case. We have now reason to believe that there are many instances of these carnivorous habits in different parts of the vegetable kingdom, and among plants which have nothing else in common but this.

Sarracenia.—The genus *Sarracenia* consists of eight species, all similar in habit, and all natives of the eastern States of North America, where they are found more especially in bogs, and even in places covered with shallow water. Their leaves, which give them a character entirely their own, are pitcher-shaped, or trumpet-like, and are collected in tufts springing immediately from the ground; and they send up at the flowering season one or more slender stems bearing each a solitary flower. This has a singular aspect, due to a great extent to the umbrella-like expansion in which the style terminates; the shape of this, or perhaps of the whole flower, caused the first English settlers to give to the plant the name of Side-saddle flower.

Sarracenia purpurea is the best-known species. About ten years ago it enjoyed an evanescent notoriety from the fact that its rootstock was proposed as a remedy for small-pox. It is found from Newfoundland southward to Florida, and is fairly hardy under open-air cultivation in the British Isles. At the commencement of the seventeenth century, Clusius published a figure of it from a sketch which found its way to Lisbon and thence to Paris. Thirty years later Johnson copied this in his edition of Gerard's *Herbal*, hoping "that some or other that travel into foreign parts may find this elegant plant, and know it by this small expression, and bring it home with them, so that we may come to a perfect knowledge thereof." A few years afterwards this wish was gratified. John Tradescant the younger found the plant in Virginia, and succeeded in bringing it home alive to England. It was also sent to Paris from Quebec by Dr. Sarrazin, whose memory has been commemorated in the name of the genus, by Tournefort.

The first fact which was observed about the pitchers was, that when they grew they contained water. But the next fact which was recorded about them was curiously mythical. Perhaps Morrison, who is responsible for it, had no favourable opportunities of studying them, for he declares them to be what is by no means really the case, intolerant of cultivation (*respuere culturam videntur*.)

He speaks of the lid, which in all the species is tolerably rigidly fixed, as being furnished, by a special act of Providence, with a hinge. This idea was adopted by Linnaeus, and somewhat amplified by succeeding writers, who declared that in dry weather the lid closed over the mouth, and checked the loss of water by evaporation. Catesby, in his fine work on the *Natural History of Carolina*, supposed that these water-receptacles might "serve as an asylum or secure retreat for numerous insects, from frogs and other animals which feed on them;" and others followed Linnaeus in regarding the pitchers as reservoirs for birds and other animals, more especially in times of drought; "*præbet aquam sitientibus aviculis*."

(To be continued.)

FINE ART.

EXHIBITION OF FINE ARTS APPLIED TO INDUSTRY.

Paris: Aug. 19, 1874.

The Association (Union Centrale) for the application of Fine Arts to Industry opened last Monday its fourth exhibition, held, like its predecessors, in the Palace of the Champs Elysées. This exhibition may be divided into four parts: in the nave are shown the highest class of art manufactures, such as porcelain, furniture, bronzes, stuffs, &c.; in the galleries on the first floor are exhibited the productions of the schools of design throughout France; next to these, illustrations of costume from the earliest period up to the end of the eighteenth century; on the opposite side the State manufactories of Sèvres, of Gobelins, and of Beauvais, exhibit their most recent productions in china, carpets, and tapestry.

The only part as yet entirely finished is the room containing the productions of our national manufactories. It is these, therefore, which I shall to-day attempt to describe. But first it is right to recall the claims of this Society to public attention—claims which have been laboriously and honourably acquired.

After the International Exhibition of 1851, and the report written thereupon by M. de Laborde, a general conviction was felt that Art must thenceforth be regarded as the greatest power at the service of Industry; every nation therefore determined to master these sources of our own long established preeminence. This was the origin of the South Kensington Museum, that admirable repository of art and science, of specimens and suggestions, which other nations have, without exception, endeavoured to imitate, while our old academy-ridden and conceited France still refuses a similar institution to the wants and wishes of the rising generation.

After the second International Exhibition in 1862, Prosper Mérimée, the reporter of the French section of the International Jury, published, laying aside generalities, the following cry of warning:—

"Since the Universal Exhibition of 1851, and even since that of 1855, immense progress has been made all over Europe; and although in France we have not remained stationary, we cannot conceal from ourselves the fact that our distance ahead has diminished, that it tends even to disappear altogether. While noticing the success of our manufacturers, it is our duty to remind them that a defeat is possible, that it may even be predicted in a not far distant future, if great efforts be not immediately made to preserve a supremacy which can be held only on the condition of perpetual improvement. English manufactures, which were especially inferior from an artistic point of view in the Exhibition of 1851, have made extraordinary progress during the last ten years, and if they continue to advance at the same pace, we soon may be surpassed."

This appeal on the part of a distinguished man, whose services in the cause of the preservation of our national architecture had already been priceless from the influence exerted over the Government and the public by his reports on the condition of the public buildings in France—this appeal originated the project formed by a few independent citizens of organising, in place of the Government, this Association for the application of Fine Arts to Industry. It is one of the most interesting and lasting attempts made by private enterprise during the corrupt period of the Empire.

In 1863, a few of the principal manufacturers of lace, bronzes, paper-hangings, carpets, furniture and jewellery met together, and chose for their president an active, good-tempered, energetic, intelligent and earnest man, M. E. Guichard, and subscribed the amount necessary for setting the scheme afloat. The name of their president is deserving of general esteem and attention. His profession is that of a decorative architect.

The Association set up its library and its germ of a museum at No. 15, Place Royale. It was soon joined by many artists, critics, and amateurs,

who, in exchange for their subscription of 100 francs per annum, received the title of co-founders, and the permission to use for three years the collections and library of the institution. We will pass over details in the history of the association, and mention only the principal facts. The museum received contributions of but trifling value, and want of funds prevented its increase. The library was more successful. Critics presented it with books on art, manufacturers with patterns, reviews with series of numbers, the Ministers of Public Instruction and of the Fine Arts with their great official publications. The Place Royale, situated on the confines of the Faubourg St. Antoine, the centre of skilled industry, was within reach of foremen, workmen and apprentices. But workmen are busy during the day, and the time of the children is taken up in the evening by the public drawing classes. They therefore took little advantage of the facilities for instruction and improvement which were liberally afforded to them—for after vainly attempting the plan of demanding small payments, the principle of completely gratuitous instruction had been unanimously adopted.

Evening lectures by distinguished men on special subjects attracted a small audience chiefly composed of the middle classes. When the subjects were of general interest, and treated in a popular manner, as in the lectures by M. Charles Blanc on *Æsthetics*, they were received with great applause. When the courses were technical they were delivered to benches as empty as those of the Collège de France when it is the turn of the Mantchou or Japanese languages.

The great success of the Association, the means by which it has acquired its real importance, was in the establishment of exhibitions. The general committee had the good sense and the good taste to delegate some of its power to a deliberative commission, which plays a part resembling that of the "Conseil d'Etat" in the State. It has no right to propose measures; its duty is to examine the proposals laid before it, to adopt, amend, or reject them. At the outside it may venture to suggest an idea, which is not adopted until acknowledged as practical in principle. To this commission we owe the plan of organizing exhibitions of art both ancient and contemporary. The most remarkable, and at the same time the most useful of these glimpses into the past and the foreign, was that of 1869, which was devoted to Oriental productions—of Turkey, Peru, India, China, Japan, &c.

To the Committee, whose decisions are received with the most courteous deference, we also owe the important enquiry into the present state of the schools of art and design. When first invited by the Association to contribute, the specimens of the schools of design from all parts of France were so feeble, so ridiculous, they outraged to such an extent every rule of art, that there was a general cry of horror. It was then that for the first time the depth was measured of the abyss into which we had fallen since the end of the eighteenth century. The great Revolution, when it broke up the old guilds on the ground that they interfered with individual liberty, instituted a new order of things which the tyranny of the First Empire prevented from assuming a definite form. Art when it became a part of the official administration no longer reached the mass of the people, its models lost all originality, and were satisfied with following the last fashion and the last book. First came the style of the Empire with its consular fæces, then that of the Restoration with its imitations of knights and troubadours, followed by the style of Louis Philippe with its Romantic mouldings. In this deplorable confusion there was lost the tradition of thorough professional teaching (not that which is given only for a few hours in a class in front of a black curtain, but the training which is imbibed in a studio, by the fireside of one's own home, or that of one's master, during the long

years of apprenticeship) which constituted our strength in former times.

Our exhibitions of works from the schools of design have not as yet solved this great problem of modern times, but they have encouraged its study by demonstrating its urgency. They have roused the old teachers. They have occasioned the foundation of new or the radical reformation of old schools of design in the great industrial centres, such as Lyons, Limoges, &c. They have stimulated a demand for new models less feeble than those which the scholars were made to copy literally, just as they were forced to learn by heart antiquated maxims without life or spirit. The progress made has been evident and marvellous. The difference between the specimens of this year and those of 1869 is really wonderful.

The Committee has also instituted competitions. Prizes are given to the artists or manufacturers who have best solved certain difficulties. Practically, no great results have been obtained. On another occasion I will recur to this subject. Hitherto all the interest has lain in the intelligent care with which these tasks are set. The French mind is not yet accustomed to a method which does not particularise every detail, and which leaves an opening to original genius and invention. In this, again, we are the victims indirectly of the official teaching of the Academy of Fine Arts, which admits of no divergence from rule.

Although the chief attraction for the public consists in the retrospective exhibitions of this society, its real benefit is derived from the exhibitions of contemporary productions. In these we see the effects of the direct impulse which has been given. Works of this kind—refined in conception, execution, form, and colour,—are lost in academical exhibitions. Here their real value is discussed and appreciated. Our medals are sought after because they are awarded by competent juries, over whom it would be difficult to exercise pressure. We have never received one serious appeal.

The society has been joined this year by some important members in a social point of view. M. Barbédienne, whose beautiful bronze reproductions are well known, and M. Denière, President of the Chamber of Commerce in Paris, have each hired a large space, which they intend to adorn with their finest works. This practical adhesion of the higher commerce needs no commentary.

Another great fact is the reception of the productions of many artistic tradesmen who did not choose to send their works to the International Exhibition at Vienna. Among them are M. Froment Meurice, a jeweller whose reputation is European, and the brothers Fasinières, bronze-workers of the first class.

A great proportion of the cases are filled with pottery. Here, too, a great progress is perceptible. It is a pity that we cannot compare the beautiful productions of the brothers Deck, for instance, with those of Minton. But the brothers Deck have at the present moment formidable rivals in France. I cannot help dwelling upon the attractions and interest of this reviving department of Art as applied to industry.

Lastly, our State manufactures exhibit their produce side by side with that of private firms. I intended to have taken my reader through these galleries, but I have been tempted to digress, and the end of my paper warns me that it is time to conclude.

PH. BURTY.

THE EXHIBITION OF COSTUMES AT PARIS.

Paris: August 17, 1874.

The fourth exhibition of the "Union Centrale des Beaux-Arts appliqués à l'Industrie" was opened on the 10th instant, by the President of the French Republic. The exhibition is held in the Palais de l'Industrie, and is divided into three groups: the modern productions of art industry,* the drawings and models of the schools of art of

Paris and the departments, and a retrospective exhibition presenting a history of the costumes of all nations from the earliest periods to the end of the eighteenth century, illustrated either by the costumes themselves, or by pictures and other works of graphic and plastic art in which these costumes are represented. The Modern Exhibition occupies the ground-floor of the building, the retrospective history of costume the rooms of the upper. It is with the latter we have to deal.

The classification employed by M. Henri Longpérier is geographical: Japan, China, and the extreme East being placed in the rooms on the right, the American peninsula on the left, Europe in the centre. Six rooms are assigned to France, corresponding to the different historical periods. The Gauls, Franks, and Carolingians are in one room; then follow the different centuries to the Renaissance, and the Valois Kings and the Bourbons, Louis XIII. to Louis XVI. All the rooms are hung with tapestries illustrative of the various epochs. In the room devoted to the sixteenth century there are few contemporary vestments, but an admirable collection of paintings and embroideries with costumes. Two curious oval pictures in needlework represent, one a stag hunt, the other bear-baiting, in which latter Diane de Poitiers is to be seen extending her staff, desiring that an unfortunate dog should be rescued from the hug of the bear. Another, already exhibited by M. Jubinal in the South Kensington Exhibition of Art Needlework, has for subject the visit of Henry III. and his queen to a lady for whose infant she is to stand sponsor. In this, and two others of similar date, the costumes are perfect, as also in the needlework back and seat of a large sofa in its original plainly turned wooden frame, the ladies wearing enormous Medicean collarettes, the men the padded hose. A curious doublet is here shown, of steel plates, covered with brown velvet, evidently used for protection against assassination. A charming terra-cotta statuette, the dress heightened with gold, gives the costume of an Italian lady of the Renaissance. The ecclesiastical vestments in this room are very rich. A crimson velvet cope, embroidered with seraphim, fleurs-de-lys, and eagles; one of black and gold, of similar design and a kind of green velvet; one of blue satin, with rich Italian scroll border, the pattern cut out and applied in yellow and white satin. In the centre of the room is a group of armour, and the cases are filled with smaller objects of jewellery, enamels, and metal work.

The room of Louis XIII. is again remarkable for the costumes, pictures, and busts illustrative of the period: among others a series of paintings, with subjects resembling the engravings of Abraham Bosse, but totally devoid of the costumes themselves. Here, too, is a most splendid set of furniture for a bed, of the richest tapestry, partly executed on the frame, partly by the needle. In the scalloped valance, figures are introduced into the pattern.

The Louis XIV. room is hung with a tapestry, representing the appropriate subject of the King's visit to the manufactories of the Gobelins, conducted by Colbert. Other tapestries on the top of the stairs, representing various incidents of his reign, are admirable for the costumes; but it is much to be regretted that so few of the actual garments have been forthcoming. There are none earlier than the eighteenth century, and none of historic interest.

The eighteenth century brings us to the time of Louis XV. and Louis XVI., when the extravagance of dress was at its climax. This is the only period which is not scantily represented, and nothing can surpass the magnificence of the men's dresses, of the richest velvets, flounced silks and satins, embroidered with massive gold and silver, pearls, and tinsel (cliquant) of brilliant metallic hues, or of the ladies' sacs of equally rich satins and silks. It is a pity some "dummies" could not have been dressed, to exhibit these coats, waistcoats, &c., to full advantage; but the difficulty

has been in procuring the head-dresses corresponding to dates, and the unwillingness to exhibit in order to complete the costume of any vestment not in its original state.

Supplementary to this series is a room assigned to the collection of ancient textiles, formed by M. Dupont Auberville, whose fine historical collection of lace calls forth so much interest in our International Exhibition of this year. His textiles range from the tenth to the eighteenth century. In those of the tenth and eleventh the patterns are so effaced by age that a tracing is given by the side of each. Next follow the Italian tissues of the thirteenth and fourteenth centuries, of Asiatic type, the patterns consisting of animals opposite each other (affronted) in silk and gold. The fifteenth still preserves the Oriental style, velvets woven with gold and silver, silk brocatella copied from the looms of Constantinople. The beginning of the sixteenth century exhibits a magnificent cope of cloth of gold—such a tissue as may have been worn by Henry and Francis on the field of Ardres. Then, with Henry II., a transition takes place; the patterns are small and geometric, silks for female costume, striped velvet for the padded hose. M. Dupont exhibits a short velvet mantle of the time of Henry III., *à crevés*, as it was called, from the perforated holes which formed the pattern and showed the doublet of silk underneath, and a fragment of the dress of Margaret of Valois, sister of Francis I. In the seventeenth century the manufactures of Lyons and the "gros de Tours" appear, creations of Colbert; large patterns of trees, pomegranates, &c. With Louis XV., the Chinese taste came in, pagodas, bridges, boats, China men and China women. Then follow the ribbon or "rivières" patterns, succeeded by medallions, which continue on to the Consulate and the Empire.

In the centre of this room is part of the vast collection of shoes formed by M. Jules Jacquemart, so well known by his brilliant aqua-fortis engravings, the "poulaines" and square toes of the sixteenth century, the raised "patins" of the Venetian ladies, "talons rouges" of the eighteenth—shoes in every variety. The series is continued in the Oriental room, and here the shoes of the Empress of China figure among the most diminutive. M. Jubinal contributes a collection of gloves.

The Oriental room is highly interesting. The Chinese dresses mostly bear the imperial insignia of the five-clawed dragon, yet cannot all have belonged to the emperor himself, the yellow always excepted—probably the members of the imperial household are allowed to wear this distinctive pattern. The Japanese costumes are even more splendid and also of the richest colours, some of them bearing the armorial insignia of the nobles of Japan. One of blue satin has the sacred "tailed" tortoise embroidered all over in gold. A white dress has the imperial insignia of the "guikmon" or chrysanthemum; another, black, is covered with the bat and other fantastic animals; and a yellow satin is sprinkled with fans. There are some fine pieces of Chinese embroidery on satin of the time of Louis XIV., one representing Pousa, the god of contentment, with the peach of longevity in his hand. Another Chinese divinity has the avia deer, also emblem of long life, by her side. The central case is filled with curious objects from China and Japan;—a series of Japanese theatrical wooden masks of extraordinary lightness, the different expressions of the countenances wonderfully given, Japanese dolls, armour, grotesque helmets, and various other curious objects of oriental workmanship.

Another room contains the costumes of Greece, with the leathern embroidered jacket of Wallachia, Hungary, Egypt, &c., another, the costumes of Spain and Mexico, rich in gold and silver, but these divisions are not completed, and it will be yet some time before the whole is finally arranged and ready for the catalogue of its contents.

It is a most novel and interesting exhibition, and reflects great credit on its originators and on

* See M. Burty's article above.

the exertions of the members of the Union Centrale in bringing the collection together, and in having turned to the best advantage the resources at their disposal.

F. BURY PALLISER.

NOTES AND NEWS.

IN connexion with the recent meeting of the medical men in Norwich, there was held in St. Andrew's Hall, in that town, an exhibition of pictures, open but for a very short time, but of unusual interest and value. The object of its promoters was to bring together as many works as possible of the Norwich school of landscape painters, and there was a goodly array of pictures by Old Crome, John Burney Crome, John Sell Cotman, Stark, Vincent, Thirtle, and others. One of the greatest Cromes was that called *The Willow*, the property of Mr. G. Holmes. Some fifty years ago it was sold by auction for 8*l*. During its sojourn at the recent exhibition it was insured for 1,000*l*. The pony introduced into the foreground of this picture was copied from a work of Hobbema's, in which Crome took special delight. The trustees of the late Mr. Hudson Gurney—who was among the helpers of John Crome—lent a remarkable work, *A View on the Paris Boulevard*, the result of a brief visit Crome paid to France in 1814. This picture was exhibited by the local (Norwich) Society of Artists in 1816. Of Cotman's work there was specially to be remarked a sea-piece—*Gale at Sea*—from the collection of Mr. T. J. Mott. Mr. John Gunn lent a most exquisite example of this master, called *The Silent Stream*: vari-coloured foliage drooping over water. A carefully prepared catalogue by Mr. J. Reeve, of Norwich, added interest and value to the gathering of works of the Norwich School.

THE little church of Birley, in Herefordshire, was re-opened on Thursday, August 20, after having undergone very thorough restoration. The attention of some local archaeologists was called to the work at an early period, and to their efforts is due the preservation of the chief features which rendered the ancient fabric interesting. In these must be included an Early English chancel arch of considerable beauty and a south chapel in the Decorated style to which a history is attached. Two centuries ago it contained in one of its windows the arms, encircled by a garter, of Burley, and we learn from the antiquary Blount that in his time there was "an ancient gravestone with the same arms as in the chapel windows." If we are to understand by this expression that the insignia of the Garter were on the tomb as well as in the window, we may perhaps infer that both were intended to commemorate Sir Simon de Burley, K.G., who was beheaded on Tower Hill, May 15, 1388—a victim either to the envy of the Duke of Gloucester, or to the arrogance of his own conduct. It is at least certain that this little parish was held under the Mortimers by the Burleys, and that the latter family was one of the most important in the fourteenth century. Walter de Burley, "*doctor perspicuus*" and tutor of the Black Prince, Sir John, Sir Simon and Sir Richard de Burley—all knights of the Garter—were among its most eminent members.

THE great gallery of the Louvre facing the banks of the Seine, after three years' work, will be shortly opened to the public. Its whole length is 700 metres. Rubens' *History of Queen Marie de Medicis* occupies one-fourth of the gallery, which will be filled with paintings by masters whose works have hitherto not found a place in the collection.

THE church of Ste. Eustache, a most important monument of the sixteenth century, devastated in the reign of Terror, and considerably damaged during the Commune, is now completely restored, a few white stones in the old blackened walls alone remaining as evidences of civil war.

THE parish church of High Wycombe—the largest and perhaps the finest edifice of its kind in

Buckinghamshire—is about to undergo restoration at the hands of Mr. Street, R.A. The estimated cost of the proposed works exceeds 10,000*l*. The church was erected in the reign of Edward I., and the tower, of unusual dimensions and character, was added in 1522. The chancel window has long been wholly concealed by the picture of *St. Paul Preaching to the Britons*, which was painted by Mortimer, in 1764, and gained the prize of the Society of Arts. We presume this work of questionable art will give place to a suitable reredos.

THE east side of the International Exhibition building has been let, it is stated, to the India Office, at a rental of 2,500*l*. per annum, for the purpose of exhibiting the contents of the India Museum, hitherto displayed at the top of the India Office. Some time ago it was reported that a new India Museum was about to be built opposite the India Office, with reading-rooms and every convenience for students; but this plan, we suppose, is now given up, unless the exhibition at Kensington is to be only temporary. It is not known as yet how the remaining space of the International building will be utilised.

MR. THOMAS STEWART SMITH, an artist and collector, has recently bequeathed a sum of 20,000*l*. to Stirling, his native town, for the purpose of founding a fine art institution. During his lifetime Mr. Stewart Smith collected a large number of paintings with this view, but his death prevented his carrying out his plans. A building has now been erected in the Italian style of architecture, with a fine-art gallery 105 feet long.

A REMARKABLE polychromatic monument has recently been raised in Florence to the memory of a young Indian prince who died in that town in 1870, on his way back from England to his native land. His body, according to his own desire, was burnt on the banks of the Arno, and this monument has been erected by his friends on the spot where the strange funeral rites were celebrated. The mausoleum is of oriental style of architecture, its chief feature being a coloured bust of the young prince, said to be a good likeness. An inscription in English, Italian, and two Oriental dialects on the four sides of the monument, states that it was erected "to the memory of the Indian Prince Rajaram Chuttraputti, Maharajah of Kolhapur, who died in Florence, at the age of twenty-one, on the 30th of November, 1870." Charles Mant, Captain R.E., and an American sculptor, Mr. C. F. Fuller, are the artists of this unusual monument.

THE *Graphic* relates that an important painting by Rubens has recently been discovered at San Francisco of all places in the world. It represents Diana and Nymphs, and is said to be, with how much truth we cannot tell, a painting by Rubens that is known to have been lost. Its American history begins at a pawnbroker's at New York, from whence it was brought to San Francisco, and raffled for 700*l*. The winner obtained it by purchase for 260*l*., and took it with him to Sacramento, where for some time it figured in the saloon of a Frenchman. It was next bought by the manager of the Forrest Theatre at San Francisco, and fortunately escaping when that theatre was burnt down, was transferred to the Folsom. After this it again turned up at Sacramento, forming the chief adornment of the railway saloon of that town, from which place it has finally been removed to its present more suitable locality in the Art Association rooms of San Francisco.

THE *Graphic* unfortunately does not state its source of information for this interesting history.

THE Belgian Fine Art Exhibition at Namur is reported to be far above the usual level of provincial exhibitions. The *Independance Belge* considers it "the most important that has ever been held in the Belgian provinces." Some of the best-known names in Belgian art may be found in

its catalogue, but it is said that a lady, Mdlle. Beernaert, bears off the palm in landscape-painting. Her paintings of the *Environs de la Haye* and *L'Escaut, Environs d'Anvers*, have attracted much notice and admiration. The same lady has a fine landscape in the Spa Salon.

AN exhibition of the works of several of the most distinguished Belgian sculptors is now open at the Fine Art Academy in Brussels. An exhibition of modern Belgian paintings may also be seen at Ghent in the large rooms of the Casino.

A MORE serious injury than that which we recorded a short time ago (ACADEMY, August 15) as having happened to two of Rubens's paintings in the Brussels Gallery, has just befallen one of that master's largest paintings, the colossal *Assumption of the Virgin*, belonging to the town of Düsseldorf. This picture is painted on wood, and recently two great cracks, the biggest wide enough to admit of the introduction of a finger, have appeared in the panel. To add to the misfortune, one of these deplorable fissures goes right through the charming head of the Madonna. The injury is attributable to the variable temperature of the gallery. It had been very damp for some time, and became too suddenly heated when the hot weather set in.

THE *Turkistan Gazette* announces that a small terra cotta pitcher has been dug up in the marketplace at Tashkend, containing silver coins of the time of Sultan Sandjari-Maza, who reigned before Tamerlane.

THE *Italia* announces that the superintendent of the excavations at Rome has just purchased, for 200,000 francs (8,000*l*.), three magnificent mosaics found at Baccano, on the Via Cassia, on property belonging to Count Gentili. These mosaics form the pavement of an ancient villa on its site. The mosaics are broken, but certain parts form complete pictures. The most important are those representing the drivers of the Circus, each holding in a horse, and dressed, like jockeys of our day, in various colours—white, red, blue, and green. Their head-dress is not unlike the modern jockey cap. The other pieces represent the Rape of Ganymede, Ulysses issuing from the Cave of Polyphemus, and a scene from the *Iliad*. The mosaics will shortly be exhibited in the Palatine Museum.

THE *Pungolo di Napoli* of August 7 states that among the objects lately found at Pompeii is one which has awakened the curiosity of archaeologists—the military discharge of a soldier of the fleet of Misenum, which formed part of the colony of veterans established at Paestum, inscribed on two tablets of bronze, tied together, and signed "S. L. Basso." It is said to belong to the period of Vespasian.

AT the annual meeting of the Royal Lombard Institute, which took place at Milan on the 7th, the bust of Carlo Possenti, one of its late members, and the statue of Count Pompeo Litta, were solemnly inaugurated. The statue of the author of the *Famiglie Celebri Italiane* is by Francesco Barzaghi, and represents him standing, wrapped in his cloak, some papers in one hand, and at his feet his sword, for he was a soldier, and some of his celebrated works.

A MARBLE medallion of Adolphe Nourrit, the celebrated tenor singer, has just been placed in the gallery of Versailles by the side of the busts of Grétry and Talma—a just tribute to a talented artist, and a high-minded man.

A REMARKABLE painting by Henri Rigaud, the *Presentation in the Temple*, has just been placed in the French Gallery of the Louvre.

THE death is recorded of M. Lancrenon, a French painter of some reputation. Lancrenon was the pupil, and afterwards the friend and collaborator of Girodet. He was born in 1794, and achieved his first success in 1816, when he carried off a second prize by his picture of the Death of

Paris. Soon after this one of his pictures was bought by the State and placed in the gallery at Fontainebleau, and about the same time he was employed to paint the ceiling of a gallery in the Tuileries with a mythological subject. Two of his most popular pictures, the *Fleuve Scamandre* and *Alphée et Aréthuse*, were exhibited in 1824 and 1825, but they made a reappearance at the French Exposition in 1855, and have since been lithographed. They are now in the Museum at Amiens. As a designer, even more than as a painter, M. Lancrenon had a long established reputation. The *Chronique* states that he was the first person who made a drawing of the Venus of Milo. It is also stated that the Museum at Besançon owes its foundation to him, as well as the school of design in that city. In 1800, at the close of the Bisontine exhibition, he was named Chevalier of the Légion d'Honneur and correspondent of the Académie des Beaux-Arts. MM. Giacomotti and Machard are among the most distinguished of his pupils.

In the *Gazette des Beaux-Arts* for this month, the Salon again occupies a large space, but two articles are also devoted to the Retrospective Exhibition of the Palais Bourbon, which, strange to say, has not been reviewed before in the *Gazette*. "Chose horrible à penser," Paul Mantz admits, "les grands maîtres ont failli attendre." For two months the poor tried critics have been obliged to fulfil the function of *Salonniers*, and have been doomed to the perpetual study of modern works.

It is with evident relief that Paul Mantz now turns to the old masters who have been waiting so patiently for his notice, and finds "all the tenderness, all the poetry of the fifteenth century" in an "adorable" Virgin and Child by Piero della Francesca, all the "naïveté of heart and childlike grace of Raphael" in his celebrated *Vierge de la Maison d'Orléans* and all the excellence of Venetian painting in the work of the "valiant portraitist" of Bergamo, Giovanni Battista Moroni. In another article Albert Jacquemart reviews and describes the pottery, glass, ivory, carvings, and metal work of the Exhibition.

Paul Baudry has an enthusiastic expounder in René Menard, who devotes a third article to the decorations of the new Opera House. One of these, a small wall-painting of the Judgment of Paris, has great beauty and classic grace. It is reproduced by photography from Paul Baudry's own drawing, and several other wood-cut illustrations are given of his works. It is impossible, however, to judge of the effect of his large wall and ceiling paintings from these small outline engravings.

A notice of the recent Exhibition of Embroidery at the South Kensington Museum; a critique on the English Royal Academy; three poems by Jules Breton, who can write poetry as well as paint it; and a capital etching by Unger of the *Delft Family*, a Dutch painting in the Royal Academy at Vienna. Unger's etching appeared some months ago in the *Zeitschrift für Bildende Kunst*; the original painting was then, if we remember rightly, assigned to Jan van der Meer van Delft, but it is now claimed by C. Vosmaër, who is a great authority on such matters, for Pieter de Hooghe. It formerly went with the name of Terburg, but it is quite unlike that master's usual work. The picture represents a sedate old Dutch family assembled in a quaint little garden behind their house. The three venerable members of the household partake of fruit laid out on a small table, two young men stand on the steps of the house, while a young man and woman stand apart, evidently enjoying the consciousness of having their portraits taken. Except for the puritanical Dutch costume, and certain artistic effects of light and shade, it is just such a family group as the photographer composes at the present day.

THE STAGE.

"THE SPHINX" IN ENGLISH.

The Sphinx, which was produced last Saturday at the Haymarket, is not likely to be very successful in England, for an English audience is sure not only to be quite alive to its faults, but a little blind to its merits. It is full of talk—the discussion of things—and an English audience hates the discussion of things. It has hardly any real comic force, and an English audience enjoys pure comedy, and has a right to do so. On the other hand, it has the merit of presenting one character—that of Savigny's wife—somewhat too fine for our common comprehension. We call her inconsistent when she distinguishes between bearing a social wrong which she is supposed to be ignorant of, and bearing that wrong when her knowledge of it is evident to those who have no right to inflict it. As long as she suffers silently she has not quite got our sympathy; and when she orders her rival away, we wish that she had done it sooner, and give her credit hardly more for wisdom than for forbearance. The contrast too, between this nature of Berthe's, which knows how to wait, and that other of Blanche's which knows only how to act and to despair, is rather lost upon us; and we see in the whole play only an elaborate contrivance of the author to lead up to a great death-scene which we have heard much talked about—the truth being that the prominence given to the death-scene probably annoyed no one more than M. Feuillet himself, who had quite other intentions, but who found, a little late, that in dealing with Mlle. Croizette for an interpreter, he was dealing with a young lady who knew her own mind and was not altogether unaccustomed to follow it. But the contrast between these two characters is really at the root of the play, and of the novel which suggested the play. On the one hand, the physical strength, the physical courage of action, even when the action is self-destruction, when it saves nothing and accomplishes nothing but oblivion: on the other hand, the mental strength, the moral courage, of abnegation. Of course the contrast has not been perfectly portrayed by M. Feuillet. The piece is marred by many faults, positive as well as negative. But the interpreters of the piece, at the Français, understood the contrast and took pains to present it. Fitter representatives of the two characters than Mlle. Croizette and Mlle. Sarah Bernhardt could not anywhere be found. When Mlle. Favart acted Blanche, here in London, the contrast, it seems, had already partially disappeared. They say that Mlle. Favart made Blanche de Chelles a wily courtesan, instead of a reckless woman playing wildly for high stakes of which she doesn't know the value.

Something of this original contrast, so plainly marked by Mlle. Croizette and Mlle. Bernhardt, was evidently intended and partially attained last Saturday at the Haymarket by Mlle. Beatrice and Miss Moodie. But Mlle. Beatrice seemed scarcely to grasp a character in which reflection has no place at all; in which no moment intervenes between the conception of an act and its execution. She wants Croizette's absolute promptness and absolute decision. She fumbles too much over the poison in the ring. It is only a few seconds more or less—very true—but the few seconds are enough to make the difference. Earlier in the piece, she has caressed the ring too often—has too often doubted whether or not "to ask from her Sphinx her secret." A thing of sudden moods, too, Blanche's manner to Berthe, when she has swallowed the poison, does not change quite sharply enough. Croizette was all defiance at one moment; all contrition and despair at the next. But if Mlle. Beatrice's performance does not show all the mastery over a particular character which is almost peculiar to Croizette, it shows much of intelligence and earnest workmanship.

The gentleness, the delicacy, the domesticity

of Berthe's character is seized and rendered by Miss Moodie very well, and yet not perfectly. Beyond the indication of these traits Miss Moodie does not go; and those who have seen Mlle. Bernhardt miss all the depth of controlled trouble in the slow and quiet phrase that follows the discovery of her husband's passion for Blanche—phrase that falls quite flat at the Haymarket—"Ah, c'est plutôt moi, qui voudrais mourir!" And where is the high womanly dignity that accepts the probability of the husband's flight with Blanche, and answers to the taunt of it, "Mon malheur ne serait pas plus grand—il serait plus digne." Moreover, Miss Moodie's representation, though entirely free from offence, is somewhat lacking in easy and unregarded grace and in social distinction.

Mr. Wenman makes of the Admiral a more pleasing figure than Maubant; but then, in doing so, and in giving only the chivalrous side of this bluff sailor's character, he appears to forget the tradition as to the Admiral's fierceness—the story how he would have shot his first wife, if he had not happened to have missed her. Mr. Frank Harvey plays Henri de Savigny very discreetly and competently. He looks a less sickly husband and lover than Delaunay, but he is of course without Delaunay's experience and stage culture at the highest of theatres. The frigidity of the Scotch peer, Lord Astley, is no doubt conceived by our neighbours to be typical. Mr. Dewhurst enters too much into the character, such as it is meant to be. It is a caricature, at the best, and an enigma, besides; but it is unnecessary to represent our typical peer as expressing himself on social questions in the tone of a very wearisome preacher, and making illicit love with the cold dignity of a court ceremonial. Among the minor characters it may be mentioned that as Lajardie—the very prosperous young French bachelor, who beams with *bien-être*, and would be more demonstratively delighted with himself if he were not also so entirely satisfied with everybody else—that as Lajardie, I say, Mr. Carter-Edwards has not the freedom and carelessness of Joumard, though his acting is by no means without point and intelligence; and, to finish, that Mr. Andrews contrives to be very amusing as the enraptured pianist—the merit would perhaps be greater if he did not limit himself so completely to the reproduction of the head and gestures of the younger Coquelin. The piece, one ought to add, is capably translated. The tone, the thought, the life, are genuinely French—whether for good or ill—and the fact that the story is so entirely untampered with will give a little interest to the problem of how far it will succeed.

FREDERICK WEDMORE.

WE hear with regret that Mr. Charles Thorne, the American comedian, whose engagement at the Gaiety closes to night, will almost immediately leave our shores.

WE understand that Miss Fowler will play the leading heroine—that is, the blind girl—in *Two Orphans*, at the Olympic, and that Mr. Henry Neville will play the cripple. These are two parts made very famous by their striking representation in Paris. There is another most important part which might have been designed for Mrs. Alfred Mellon, so completely, we believe, do her powers fit it. Who will play it is as yet unfixed.

Janet Pride has proved attractive enough, at the Princess's, for there to be no further mention of the *Willow Copse*. *Lost in London* is promised to our provincial visitors, instead. With Mr. Emery, Mr. Belmore, and Miss Foote in the cast, it will not be badly supported.

THE Vaudeville did not close last Saturday, as it was at one time announced to do. *Old Heads and Young Hearts* and *Creatures of Impulse* continue to be performed, though next week there will probably be some changes in the cast of the comedy, from which, as our readers know, Messrs. James and Thorne, and Miss Amy Roselle have for several weeks been absent.

THE last nights of *Clancarty* are announced at the Olympic, but there has recently been such a change in the cast as to constitute almost a new performance. Only two important parts, if we recollect aright, are now played by their first representatives. Mr. Voltaire is still Lord Portland, and Mr. Sugden (*alias* Charles Neville) is still William III. His acting, which we mentioned with special praise several months ago, remains among the best that is to be seen in London. There is nothing but the too apparent youth and vigour of the voice with which fault may reasonably be found. It is a pity this is not more thoroughly controlled and subdued, for, if it were, then Mr. Sugden's performance, which is already entirely artistic in intention, would be most absolutely satisfactory. Mr. Vernon has assumed Mr. Henry Neville's character, of *Clancarty*. He plays it without Mr. Neville's buoyancy, but with sterling qualities of his own. Miss Ada Cavendish—never quite at home in the part of Lady *Clancarty*—has, in abandoning it to Miss Carlotta Addison, given it to a lady who plays with less courtliness; with greater simplicity and directness. Miss Fowler has resigned the part of Lady Betty Noel in favour of Miss Marion Terry, who makes a marked advance in her profession by the care, delicacy, and sharpness with which she represents the character.

MR. IRVING has been acting at Liverpool during the present week.

A COMPANY organised by Mr. Frederick Wright for the performance of Mr. Farnie's popular *Nemesis*—and having the sole right to perform that piece in the provinces—has this week been giving a very creditable representation at the Theatre Royal, Norwich. Among the principal members of the company are Mr. H. Bicker and Miss Rose Temple, from the Gaiety, who acquit themselves very pleasantly, in the parts "created," we believe, by M. Marius and Miss Bromley.

MR. BARRY SULLIVAN is going to America.

The Broken Branch, which, as its name clearly indicates, is an English adaptation of M. Gaston Serpette's comic opera, *La Branche Cassée*, was produced at the Opéra Comique on Saturday night; the principal characters being played by Miss Laverne, Miss Rita, and Mr. Chatterton.

THERE has been nothing new at the French theatres during the last week or so. *Mademoiselle de Seiglière* has been revived at the Théâtre Français for the *rentrée* of Mlle. Croizette.

DID Molière ever eat with Louis the Fourteenth? One of Ingres's worst pictures, and one of Gérôme's best, are devoted to the perpetuation of the legend that he did; but perhaps the need for such a story occasioned the supply of it: the character of the Grand Monarch would hardly have been complete if he had not given his courtiers a lesson in humility, worthy of Canute himself. For that is what it really was, if it was anything at all; but far more probably the thing never happened. So at least thinks M. Eugène Despois, who, in his book which was noticed in the ACADEMY last week (*Le Théâtre Français sous Louis Quatorze*) has gravely discussed the question. The legend, he remarks, is rather a young one for a legend of the time of Louis Quatorze. It is only fifty years old, having first appeared in 1823, in the *Mémoires* of Mme. Campan. She had the story from her father-in-law—so she said—and he, for his part, had it from an old doctor who was physician-in-ordinary to the Grand Monarch himself. The doctor must have been marvellously young when he received it (or when he was physician-in-ordinary), and marvellously old when he imparted it. There is another story, but that was set down in writing at the time, that Louis received at his table the wife of the director of the Garden of Plants—one Mme. Vallot, whose husband had offered to the monarch a luncheon of fabulous costliness, which moved the sovereign to this gracious and delicate return. But that, of course, is quite another

business, or, as an argument, can be turned either way, for "see the gracious condescension of the monarch!" say some, who believe in the story about Molière; while others say that as this deed of Louis's was chronicled at once in proper form, so would the king's extraordinary attention to Molière have been had it ever occurred. Moreover, the extreme improbability of any such act to a comedian is to many the best reason for disbelieving it. Not before the end of the siege of Namur did Vauban, to whom Louis owed so much, eat at his table. The clergy were excluded, unless they were bishops or cardinals. Now, at that time, would Molière have received a distinction denied to Bossuet? "Ailleurs qu'à l'armée," says Saint-Simon, "le roi n'a jamais mangé avec aucun homme"—a sentence that might have been written prophetically, to contradict the story. That is enough for M. Despois, who finally answers the question in the negative; but as no chronicler has ever watched a monarch at every moment of his life, and as nothing is certain but the unforeseen, and as no privilege of royalty in times past has been seized more readily than the privilege to be unconventional and whimsical without reproach, French literature of gossip may, we imagine, still keep its story, and the Théâtre Français its picture—which hangs in a place of honour in the green-room, and, if not a record of encouragement bestowed on art, may be at least an incentive to it.

WE may refer our readers to the last number of the *Revue des Deux Mondes* for a very detailed account of the Theatre in Japan. Not only are the conditions of the performance described, but there is a long analysis of the pieces presented. Here we have only space to give one or two little facts. There are several theatres in Yeddo: those of Shimabara and of Naki-Bashi, situated in the middle of the town, attract chance audiences, which are not always the best: that in the suburb of Asaksa is the *rendezvous* of fashion. In London and Paris you dine an hour earlier than usual if you want to go to the theatre; but in Japan you have to get up earlier, for the play will begin at six of the morning, and will last the livelong day. Nay, there are pieces which last three days. The audience returns to its work with the patience and perseverance of a member of the British Association. Music beguiles the time. It is played during the long *entre-actes*, and it accompanies in nearly all cases the recitation of the piece itself. The spectators face each other and not the stage, of which they have but a side view. They sit in boxes, and each box holds four people. Among the players there are no women. Young men well draped impersonate them. The men themselves are accorded only the very lowest social position, and yet, strange to say, at their death they are rewarded with the tears of the town. A long procession forms part of the funeral arrangements. They are popular favourites or lamented playthings, but no celebrity ever gains for them admission into the good society of Yeddo. Good society may visit them; but they are never allowed to return good society's call.

MUSIC.

COMPOSITIONS BY EDVARD GRIEG.

- Humoresken für das Pianoforte*, Op. 6. (Leipzig: Peters.)
- Sonate (E moll) für das Pianoforte*, Op. 7. (Leipzig: Breitkopf und Härtel.)
- Sonate (F dur) für Pianoforte und Violine*, Op. 8. (Leipzig: Peters.)
- Sonate (G dur) für Pianoforte und Violine*, Op. 13. (Leipzig: Breitkopf und Härtel.)
- Concert für Pianoforte und Orchester*, Op. 16. (Leipzig: E. W. Fritzsch.)

MODERN composers may be divided into two classes—those whose style is founded more or less directly on some one or more of their predecessors,

and those who have a distinct individuality of their own. The former, it need scarcely be added, outnumber the latter in the proportion of, perhaps, hundreds to one. Not to speak of the swarm of mere imitators, the disciples of the Mendelssohn school are legion; even Brahms and Raff, great as they are, especially the former, owe much to Schumann; while in music for the pianoforte, such for example as that of Rubinstein, the influence of Liszt is often unmistakable. It is an interesting fact that so many among the most original of modern composers should have come from northern countries. Chopin, the embodiment of Polish music; Gade, in whom, with many traces, not to say reminiscences of Mendelssohn, is to be found a northern colouring, due doubtless to his Danish birth; and, lastly, the two Norwegian composers, Svendsen and Grieg, all illustrate the correctness of this assertion. Of Svendsen's music we have already spoken on the occasion of a performance of his Octet (see ACADEMY of March 7); to-day we propose to direct the attention of our readers to some of the works of Edvard Grieg.

This young composer was born at Bergen in the year 1843. His published works number at present about twenty. Of these many are printed in Norway, and are not therefore easily to be met with in this country. These consist, for the most part, of small pieces; his most important compositions are those the names of which are at the head of this article; and from these it is possible to form a fair estimate of the character and limits of his genius.

The first thing which will strike a musician on making their acquaintance is their intense and absolute novelty. It is really refreshing to meet with anything so far out of the beaten track. Some of the music is, indeed, so excessively original that its beauty hardly strikes one on a first hearing. Its great individuality arises from its strong northern character, and the ear requires to be somewhat accustomed to the unusual melodic progressions and strange rhythms before they can be fully appreciated. This is especially the case with the "Humoresken," and the sonata for piano and violin in G. The music, moreover, is rather awkward to play—not precisely difficult, in the sense of requiring great executive powers, but uncomfortable until one becomes familiar with it because of the unconventional character of the passages and the constant surprises of the music. The French proverb might be quoted with respect to it "Ce qui arrive, c'est l'inattendu."

The "Humoresken," which stand first on our list, are four small pieces, three of which are in triple time. Here it may be remarked that Grieg exhibits a strong partiality for triple time, and for mazurka and waltz-like rhythms. The first of these pieces is in reality a mazurka, of a charming freshness, and not difficult to play. No. 2 is a vigorous "Tempo di Minuetto," in the somewhat unusual key of G sharp minor. In its general character it reminds one (though with an indefinable yet perceptible difference) of Chopin. The following number "Allegretto con grazia," though only one page in length, is a little gem. The alternations of tenderness and energy, and the strange progressions of the harmonies give this little piece a character altogether unique. Not less interesting is the "Allegro alla burla," in G minor, which concludes the series. The chief theme is founded on one of Grieg's favourite dotted rhythms, and the counter-subject in B flat is one of those wild and dreamy melodies which once heard are not easily forgotten.

The sonata for piano solo in E minor is one of the most interesting works of its composer. The first movement is not equal to those which follow it, being occasionally reminiscent of Beethoven and Weber. This resemblance is chiefly apparent in the first subject and the developments of the second part of the movement; the second subject is thoroughly original. The "Andante molto," in C major, is a most expressive melody,

a genuine "song without words," rising in its middle portion to a storm of passion, which dies away at its close in the wildest and strangest sequence of harmonies (see the *a tempo*, p. 11, last line but one). The third movement, "Alla Minuetto," is indescribable in its quaint charm. Indeed, in writing on such music as this, it is impossible not to feel forcibly the poverty of language. Words will not paint the effect of music, especially when, as in the present case, that music is totally unlike any other. The finale is, in some respects, the most remarkable part of the sonata. The opening arrests the attention at once, and there is a sustained vigour about the movement which carries both player and hearer away. But the most striking point in this finale is the second subject. Here, with a daring perfectly unique, Grieg has boldly violated one of the fundamental rules of harmony by introducing "consecutive octaves" between the extreme parts for four bars. The effect is so new that, at a first hearing, a musician will be absolutely staggered at it; and yet there is a wild beauty about it which is its complete justification. All pianists will thank us for introducing to their notice this very remarkable work.

The two sonatas for piano and violin are of unequal merit. The earlier one in F, though not less original than its composer's other works, has not so much of that spontaneous charm which characterises the pieces already noticed; but the second sonata in G is, in all respects, excellent. It may be considered as a fault that, with the exception of one page of introduction, the entire work is in triple time; but such is the variety of its rhythms that little or no feeling of monotony is produced. It is difficult to say which of the three movements is the most beautiful. Perhaps the palm must be given to the melancholy Andante in E minor. The episodic subject in E flat in the finale is especially lovely. The novelty of the whole work is so great that it is quite possible that it may not be understood at a first hearing; it requires, besides, first-rate playing from both performers, being of considerable difficulty. It has, we believe, been given by Mr. Hallé at some of his recitals in the country with Madame Norman-Néruda; but it has not yet (so far as we know) been heard in public in London.

The concerto in A minor for piano and orchestra, which was played by Mr. Dannreuther at a recent Crystal Palace concert for the first time in England, while one of the most recent, is also one of the most interesting of Grieg's works. In its general form it is modelled after that of Schumann. The solo instrument begins at once—the key-note only being previously given by the orchestra. After five bars of brilliant introduction for the piano, the principal theme of the first allegro is announced by the wind instruments. This theme is remarkable for its originality, both of rhythm and melody; it is repeated by the piano, with some elaboration of the accompaniment, and a series of brilliant passages of display lead us ere long to the second subject in C major—a melody of great tenderness, given to the brass instruments *piano*, likewise repeated in a more ornate form by the pianist. The remainder of the movement is strictly orthodox in form, and full of the most interesting details, some of the modulations (such, for example, as those on pages 18 to 21 of the score) being remarkably bold. Following the example first set by Beethoven in his E flat concerto, the composer has written his own *cadenza*. The whole of this first movement is concise, powerful, and eminently original. The following adagio, in the remote key of D flat, has a very strange wild beauty about it, not a little heightened by the peculiar orchestral colouring. The strings are muted, and all the louder instruments are silent. The first *tutti* has a dreamy character which is simply indescribable, and the way in which the music gradually dies away, one lovely close following another, is one of the most striking things we have met with for a long while. The passages for the

piano which follow consist almost entirely of elegant figures of musical embroidery, supported chiefly by sustained harmonies for the strings. Towards the close of the movement, the chief theme is given to the piano *fortissimo*, but the prevailing tone of tenderness soon returns, and the adagio ends with the series of cadences above referred to, now in a slightly altered form. The finale is as vigorous as the slow movement is tender and delicate. Strongly marked rhythms and abrupt changes are its prevailing features. Very characteristic of Grieg is the introduction of the wild and romantic episode in F (page 66 of the score), so broadly contrasted with the principal theme, and yet not out of keeping with it. The solo part of the work is of great difficulty, hopelessly beyond the reach of any but first-class players. It is, however, most brilliant and effective, while the orchestration of the whole concerto is highly interesting.

It will be seen from our remarks that we have a very high opinion of Grieg as a composer. He is a man of very great originality of idea, and of sufficient acquirements to be able to use his ideas to the best advantage. That he deserves the title of "genius" there can be little doubt; at the same time, it should be distinctly understood that he is not, if one may use the expression, a musical *cosmos* like Beethoven or Mozart. His genius is rather of a nature which moves within a somewhat limited circle. There is a strong family likeness between all the works we have been noticing; and, as said above, their chief characteristic, and it may be added their peculiar charm, consist in their northern colouring. Some musicians will find this peculiar musical flavour more to their taste than others; but it may be safely promised that all who will look into Grieg's music will procure for themselves what in the present day is by no means easy to obtain—a feeling of becoming acquainted with something absolutely new in music. ERENEZER PROUT.

It is announced that Madame Florence Lancia will make her last appearance in opera at the Crystal Palace this day, in the character of Marguerite in Gounod's *Faust*.

M. GOUNOD is, we understand, about to return to France, and will not take part, as originally announced, in the Liverpool Musical Festival.

FÉLICIEN DAVID has completed the composition of a grand opera entitled *L'Indien*, which is to be shortly produced at the Opéra Comique, Paris.

FOLLOWING the example set by Verdi in his Requiem for Manzoni, a Neapolitan composer named De Giosa has written a Requiem for Donizetti.

HENRI VIEUXTEMPS, the distinguished violinist, is leaving Brussels to reside at Paris. His successor as professor at the Brussels Conservatoire is to be Henri Wieniawski.

WAGNER'S *Rienzi* and Verdi's *Aida* are in preparation as novelties at the National Theatre in Buda-Pesth.

A NEW edition (the fifth) of Franz Brendel's *History of Music* is in preparation; and a continuation down to the present time will be added by Dr. F. Stade.

ON October 31 Herr Julius Rietz will celebrate, in Dresden, the completion of forty years' conductorship.

GLASGOW is at length to have a resident orchestra. The Festival Committee having obtained a guarantee fund of nearly 4,000*l.*, have engaged an orchestra of over fifty performers for a period of sixteen weeks, from the beginning of November. During this period a series of sixteen subscription concerts, one every week, will be given in the City Hall.

POSTSCRIPT.

A TELEGRAM from Paris announces that the remains of Leonardo da Vinci have been found in a perfect state of preservation by some masons engaged in repairing Amboise Castle.

The tomb of the great Italian master, who found his last resting-place in France, has long been an object of search. The fate that destroyed so many of his works seems to have pursued even his grave. In his will Leonardo gave directions that his body should be laid in the church of St. Florentin, at Amboise, and it has always been assumed that his directions were carried out. But soon after his death Amboise was devastated by war, and according to tradition, the church, and even the graves of the dead, were violated; at all events, no tomb of any note remained in the church at the time of its demolition, in 1808, by order of the Senator Roger Ducos. After this, when pilgrims came from Italy to enquire for the grave of Leonardo, they were shown a waste spot covered with debris, where the church of St. Florentin formerly stood. It was on this spot that M. Arsène Houssaye, Leonardo's French biographer, instituted his search in 1863, and was rewarded, as he fondly believed, by the discovery of the skeleton of Leonardo and portions of his tomb. The skull of this skeleton was examined with respect, and "recognised" by M. Houssaye and one or two like enthusiasts as "the grand and simple outline of that human yet divine head which once held a world within its limits." M. Houssaye's deductions, however, were scarcely sound enough to support such a vast theory, and we are not astonished to see them demolished by the discovery now announced—a discovery that, to judge by the wording of the telegram, places the matter beyond doubt. Either Leonardo was not buried in St. Florentin, or his remains, as seems more likely, were removed from that church at the time of its destruction to the Castle of Amboise. The leaden coffin containing the great painter's body, it is further stated in the telegram, will be transferred by the Comte de Paris' order to the castle chapel.

WE regret to see the death announced of Mr. J. H. Foley, R.A., which occurred on Thursday last.

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